The Journal of the American Medical Association

Published Under the Auspices of the Board of Trustees

VOL. 129, No. 17 — CHICAGO, ILLINOIS — DECEMBER 22, 1945

COPYRIGHT, 1945, BY AMERICAN MEDICAL ASSOCIATION

THE PENICILLIN TREATMENT OF SUBACUTE BACTERIAL ENDOCARDITIS

SOME PROBLEMS

ARTHUR L. BLOOMFIELD, M.D.
AND
RICHARD M. HALPERN, M.D.
SAN FRANCISCO

That subacute streptococcic bacterial endocarditis can be "cured" by penicillin therapy now seems securely established.[1] However, among the reported cases there are many in which apparent recovery—disappearance of toxic symptoms, fever and bacteremia—was soon followed by reappearance of organisms in the blood stream and resumption of a downhill course.[2] Large statistics obtained under uniform conditions are not yet available, but in general recurrence seems to have taken place in one fourth to one half of the treated cases. It is important therefore to inquire into the reasons for failure in the hope of improving a method which has already yielded brilliant results in an otherwise uniformly fatal disease.

THE OPTIMUM DURATION OF TREATMENT

Assuming that one is dealing with a sensitive strain, the first question is that of the optimum time-dose relationships in the administration of penicillin. Over how long a period of time should penicillin be continued and how much should be given each day and in how many doses? Is it necessary to maintain a high blood level during the entire twenty-four hours? These and other similar questions must be answered in order to map out a program which will yield the highest percentage of cures. It is noteworthy therefore that most of the reported patients have been treated for periods of only two to three weeks and rarely longer than four consecutive weeks; as just pointed out, recurrence has taken place in a considerable number of these cases. In contrast to these experiences with relatively brief therapy we have a series treated over a two months period in which very much better results have been achieved. This group, some members of which have already been reported,[1] now consists of 18 consecutive cases. Seven of these patients have been followed after completion of treatment for periods of over a year (twelve to seventeen months), the remainder for periods of three to eleven months. In no instance has there been a recurrence of symptoms of active infection or the return of a positive blood culture. One criterion for the selection of these patients was that the strain of streptococcus be sensitive to penicillin in the test tube in a dilution of at most 0.1 unit per cubic centimeter of culture medium. Furthermore, at least 160,000 to 200,000 units of penicillin was usually given in the twenty-four hours either by continuous drip or in not less than four intramuscular injections. The incidence of bacterial and clinical arrest in 100 per cent of this series is to be contrasted, as has been pointed out, with the figure of approximately 50 to 75 per cent in the more briefly treated cases reported in the literature.

It seems established therefore that, regardless of daily dose, treatment should be continued over a period of at least two months (and perhaps longer in some cases) if the highest percentage of cures is to be obtained. The proposal to treat for a shorter time and then to give more penicillin in case of a relapse does not seem sound to us, since whatever ground was gained by initial inadequate therapy may have been completely lost by the time relapse is evident. Indeed, one may actually be in a worse position since the infecting streptococci may have developed increased resistance to penicillin when subcurative doses are given.

"Pseudo-cure" from treatment not long enough continued is illustrated by the following case:

CASE 1.—A man aged 32, a sheet-metal worker who had had polyarthritis at the age of 13, was told six years ago that his heart was bad. However, he was well and at work until November 1944, when he developed chills, fever, sweats and weakness. The finger tips were sore. A blood culture was reported positive for Streptococcus viridans and he received penicillin for three days from an outside doctor. The temperature dropped but recurred when penicillin was stopped. Penicillin was resumed on January 22 at the rate of 120,000 units daily in divided doses. This was continued until entry to Stanford Hospital on Jan. 30, 1945. The temperature then was practically normal but he was sweating. No petechiae were seen and there was no clubbing of the fingers. The spleen was not felt. In the aortic area one heard a loud roughish systolic murmur and an echoing diastolic. The blood pressure was 140/40. Penicillin was discontinued and blood cultures were made to confirm the diagnosis. On January 30 and February 1, 2 and 3 blood cultures all yielded 2 to 3 colonies of nonhemolytic streptococci per cubic centimeter of blood. The organism was partly inhibited by 0.05 unit of penicillin per cubic centimeter of culture medium, completely by 0.1 unit. This strain was therefore not especially sensitive. Penicillin was started on January 3 (fig. 1) at the rate of 25,000 units intramuscularly every three hours except for the omission of one dose at night, a total of 175,000 units daily. This treatment was continued for thirty days, in all 5,460,000 units being administered. During this time his course was uneventful, he felt

From the Department of Medicine, Stanford University School of Medicine.

The penicillin was provided by the Office of Scientific Research and Development from supplies assigned by the Committee on Medical Research for clinical investigations recommended by the Committee on Chemotherapeutic and Other Agents of the National Research Council.

1. Bloomfield, Arthur L.; Armstrong, Charles D., and Kirby, William M. M.: The Treatment of Subacute Bacterial Endocarditis with Penicillin, J. Clin. Investigation **24**: 251, 1945.
2. Dawson, M. H., and Hunter, T. H.: The Treatment of Subacute Bacterial Endocarditis with Penicillin, J. A. M. A. **127**: 129 (Jan. 20) 1945. Meads, M.; Harris, W. H., and Finland, M.: The Treatment of Bacterial Endocarditis with Penicillin, New England J. Med. **232**: 463, 1945. Anderson, D. G.: The Treatment of Infections with Penicillin, ibid. **232**: 423, 1945. Spink, W. W.: Penicillin Therapy at the University of Minnesota Hospitals 1942-1944, Ann. Int. Med. **22**: 510, 1945.

perfectly well and the rectal temperature curve showed very slight elevation, rarely above 37.5 C. (99.5 F.). During the month of treatment seven consecutive blood cultures were sterile. Penicillin was stopped on March 4, when the infection appeared to be arrested. The temperature remained practically normal, the physical signs over the heart were unchanged and the patient felt perfectly well but blood culture two days later (March 6) was again positive. A second culture on March 8

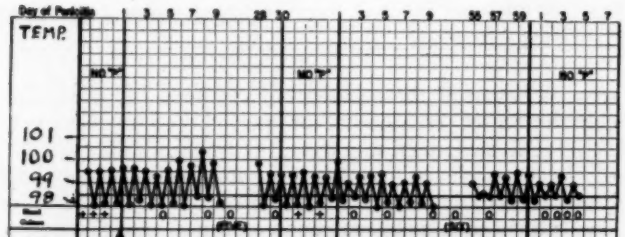


Fig. 1.—Course in case 1 ("P" means penicillin).

also yielded several colonies per cubic centimeter of blood. The prompt recurrence of bacteremia made it clear that the infection had not been eliminated by four weeks of treatment but merely suppressed to a point where no organisms were recovered by the relatively crude technic of blood culture.[3] The strain recovered on March 6 seemed to be the same as that isolated before treatment was started and the organism showed the same in vitro sensitivity to penicillin. Inadequate treatment in this case did not lead to increased resistance. On March 5 penicillin therapy was resumed (fig. 1) at the rate of 40,000 units intramuscularly every three hours, or 320,000 units daily. This dosage was continued for sixty days. The blood again immediately became sterile and ten cultures during the treatment period yielded no growth. This time the infection appeared to be eliminated and four blood cultures made after penicillin was discontinued were all sterile. The patient left the hospital on May 11, and follow-up examination on Augst 21, over three months later, showed no signs of recurrence and blood culture was negative.

THE OPTIMUM DAILY DOSAGE

Our first cases were treated by continuous intravenous infusion of penicillin on the presumption that it was advisable to maintain an effective blood level at all times. Technical difficulties, however, forced a trial of intermittent intramuscular injections and it soon was evident that large doses of penicillin given every three hours were fully effective in the ordinary case with a sensitive strain of streptococcus. It was clear that regardless of theory a continuous blood level was not always necessary in practice and the question came up as to the minimum number of daily injections which would suffice for a cure. This problem has been dealt with experimentally in our laboratory by Jawetz,[4] who finds in the case of streptococcic peritonitis in the mouse that nearly all the animals can be saved from an otherwise fatal infection by injections of penicillin at four hour intervals provided the individual doses are sufficiently large.

A group of 4 patients were treated with intramuscular injections given only every six hours for two months. The individual dose as a rule was 50,000 units. Three of these patients are apparently well. In the fourth this plan of treatment seemed inadequate and cure was obtained after treatment was intensified. Case 2 illustrates cure of bacterial endocarditis by intramuscular injections given every six hours:

Case 2.—A woman aged 22, a housewife, entered the hospital on Aug. 11, 1944 complaining of fever and weight loss for a month. She was said to have had a heart murmur since early childhood, but there was no definite story of rheumatic fever. A tooth was extracted in May 1944, but no symptoms developed at that time. On entry fever varied from 38 to 40 C. (100.4 to 104 F.). She was somewhat thin. There were a few scattered petechiae. The spleen was felt 3 cm. below the costal margin. There was a loud systolic murmur at the apex. There was definite anemia, but the urine was clear. Blood culture yielded 100 colonies of nonhemolytic streptococci per cubic centimeter. The strain was completely inhibited in vitro by 0.1 unit of penicillin per cubic centimeter of medium but not by 0.04 unit. Penicillin was started (fig. 2) on August 21 in a dosage of 50,000 units intramuscularly every six hours. Within forty-eight hours the patient felt much better and "toxic" symptoms disappeared. The temperature began to fall promptly and was practically normal within a week. The course from this time on was uneventful except for pain in the left side and swelling of the spleen from the eleventh to the seventeenth days of penicillin administration, probably because of splenic infarct. Blood culture taken the day after penicillin was started was sterile, and eleven subsequent cultures through October 13 were consistently negative. On August 22 she received a transfusion and from that time the blood count rose and was essentially normal on discharge. Penicillin was given at the rate of 200,000 units daily for thirty days. The dose was then dropped to 120,000 units daily given in four injections of 30,000 units. The total amount of penicillin given during the sixty days of treatment was 9,590,000 units. The temperature remained essentially normal and during the last week of her hospital stay—after penicillin had been stopped—did not go above 37.4 C., or 99.3 F. (rectal). During this period four blood cultures were sterile. During the latter part of her stay there were no embolic symptoms, nor were any petechiae seen. On discharge, October 28, the same loud systolic murmur heard on entry was still present. The tip of the spleen was just felt at the costal margin. She felt perfectly well. On follow-up visits in December 1944 and in January and February 1945 blood cultures remained negative and she felt perfectly well.

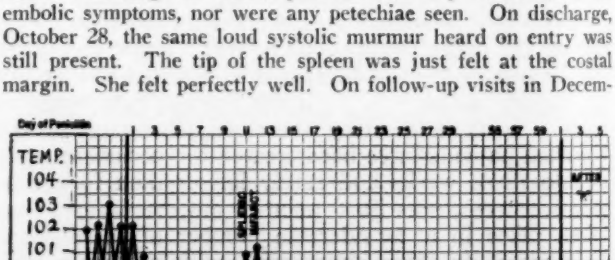


Fig. 2.—Course in case 2.

In March 1945 she was found to be three months pregnant. Her condition was so good that it was decided to let the pregnancy continue. In August 1945 nearly at term she showed no signs of cardiac failure or of active infection, and blood culture was sterile ten months after conclusion of penicillin therapy. On August 6 she was delivered of a healthy baby without difficulty and went through an uneventful puerperium. Blood cultures were negative.

3. Interpretation of "negative" blood cultures: Failure to recover bacteria does not exclude the presence of living organisms in the vegetations or in the blood stream. Negative blood cultures may be obtained for one of the following reasons:
1. The bacteria may be so few in number that they may actually be absent from small samples of blood.
2. The bacteria may fail to grow in culture if their numbers are few or their nutritive requirements fastidious.
3. Bacteria may be filtered out in capillaries if venous blood is used for culture, although blood from antecubital veins gives colony counts only slightly lower than arterial blood (Beeson, P. B.; Brannon, E. S., and Warren, J. J.: Observations on the Sites of Removal of Bacteria from the Blood in Patients with Bacterial Endocarditis, J. Exper. Med. **81**: 7, 1945).
4. If the immunity of the body is high, organisms swept into the blood stream from a valve may be promptly killed or inhibited so that growth fails.
5. The bacteria may be growing chiefly in masses of vegetation, where they are sealed off by fibrin so that bacteremia is rare.
6. With right sided lesions it may be hard to isolate bacteria from the peripheral venous blood because of filtration in the lungs.

4. Jawetz, E.: Observations to be published.

Even though the strain of streptococcus was not highly sensitive to penicillin in the test tube, cure was accomplished by a scheme of treatment in which "effective" blood levels were maintained for not more than one fourth of the time. It is obvious therefore that factors other than bactericidal effect enter into the process of recovery.

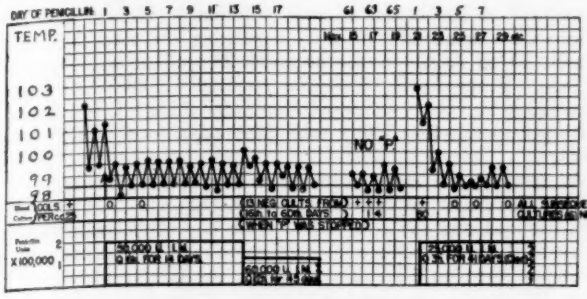


Fig. 3.—Course in case 3.

When it was found that injections given only four times in the twenty-four hours sufficed to arrest the infection in some cases, it was decided to try the effect of penicillin given at twelve hour intervals. As will be seen from the following case report, two intramuscular injections of 60,000 units each in the twenty-four hours suppressed the evidence of active infection, but positive blood cultures were immediately obtained when penicillin was stopped even though the treatment had been continued over a period of two months:

CASE 3.—A man aged 60, Greek, a tailor, had previously been well and was unaware of any heart trouble. Five weeks before entry all his teeth were extracted. He bled a great deal and was too weak to resume work. Two weeks or so later he noticed fever and sweats. On entry, Sept. 15, 1944, he looked ill. He was febrile and sweaty. Some fading petechiae were seen in the conjunctivas. There was a blowing diastolic murmur in the aortic area. The spleen was not felt and there was no clubbing of the fingers. There was pronounced anemia. The urine was clear. Blood culture yielded 25 colonies of a nonhemolytic streptococcus per cubic centimeter. These organisms were completely inhibited by 0.05 unit of penicillin per cubic centimeter of culture medium, so that the strain was quite sensitive. Penicillin was started (fig. 3) on September 15 in a dosage of 50,000 units intramuscularly every six hours, or 200,000 units daily. The temperature promptly dropped to normal and the blood culture became sterile. After two weeks of this dosage it was decided to give only two injections of 60,000 units each in the twenty-four hours. During a period of forty-five days on this dosage thirteen blood cultures were all negative and except for a mild episode of fever on the twenty-eighth and thirtieth days of treatment, probably the result of pulmonary infarct, the temperature remained practically normal and the patient felt well. On the forty-fifth day of treatment he had a short bout of auricular fibrillation. When sixty days of penicillin treatments were concluded on November 14 it was believed that he was probably cured. However, blood culture November 16 was positive; culture on November 17 yielded 1 colony per cubic centimeter, November 18, 4 colonies and November 21, 80 colonies. By this time the temperature was again highly elevated and it was clear that the apparent arrest of the disease by two daily injections was actually not achieved. The strain isolated on November 18 showed no definite change in sensitivity, being partly inhibited by 0.05 unit and completely by 0.1 unit. Treatment was resumed on November 21 at the rate of 25,000 units intramuscularly every three hours, or 200,000 units daily. The temperature promptly fell to normal and blood culture on November 25 as well as all subsequent cultures was sterile. The infection again seemed to be extirpated, but the patient now had frequent bouts of auricular tachycardia, auricular fibrillation and sometimes flutter. Evidence of congestive failure developed. On December 25 he had a bout of acute left ventricular failure. X-rays showed great increase in the size of the heart since entry. On December 30 he had frank cardiac failure and on Jan. 1, 1945 he died suddenly. Autopsy was not permitted.

These 3 cases illustrate very clearly the importance of time-dose relationships in the penicillin treatment of bacterial endocarditis. It is clear that one must consider (1) the size of the individual dose and the number of doses in twenty-four hours, (2) the total twenty-four hour dosage and (3) the total duration of treatment. Even with frequent large doses cure often is not achieved if the duration of treatment is brief (one to three weeks), as pointed out in the literature.[2] On the other hand, even long treatment (two months) fails if the daily doses are too few or too small. At the present time then, assuming that the strain is sensitive, the best treatment seems to consist of four to eight intramuscular injections of penicillin in the twenty-four hours with a total daily dose of at least 200,000 units continued over a two months period. This scheme will doubtless be modified when proper methods for prolonging the action of penicillin are developed, but the principles brought out will be unchanged. Much further study of these time-dose relationships is obviously necessary.

STRAIN SENSITIVITY

Fortunately only a small percentage of patients with subacute bacterial endocarditis have strains of streptococcus which are "completely" resistant to penicillin, so that the organism grows freely in mediums containing large amounts of the antibiotic.[5] In cases of this sort it has been our experience that penicillin is entirely ineffective. On the other hand the patients who respond promptly to penicillin therapy usually have strains which are inhibited in the test tube by 0.05 unit or less of penicillin per cubic centimeter of culture medium. If more penicillin than 0.1 unit per cubic centimeter is required for inhibition, the strain is regarded as not highly sensitive and "standard" treatment may be ineffective.

Failure of ordinary treatment in a case with a relatively resistant strain but ultimate cure by very large doses of penicillin is illustrated by the following report:

CASE 4.—A woman aged 48, a housewife, had been ill with chills, fever and aching for two months. Blood culture had been found positive several times for Streptococcus viridans. There was no story suggestive of any heart trouble in the past. There was moderate fever. No petechiae were seen. The first heart sound at the apex had a thudding quality and was followd by a soft systolic murmur. It was supposed that she had a mild congenital lesion, possibly a septal defect with bacterial implantation. There was no clubbing of the fingers and the spleen was not felt.

Blood culture on Oct. 14, 1944, before treatment was commenced, yielded 110 colonies of nonhemolytic streptococci per cubic centimeter. The sensitivity test showed that 0.2 unit of penicillin per cubic centimeter of medium was necessary for complete inhibition. This strain was therefore not highly sensitive but it seemed sufficiently on the borderline to justify treatment. Penicillin was started on October 17 (fig. 4) and continued for sixty days—from October 17 to October 25, 50,000 units every six hours intramuscularly; October 25 to November 9, 40,000 units every three hours intramuscularly; November 9 to November 16, 400,000 units daily by continuous intravenous drip; November 16 to December 16, 40,000 units every three hours intramuscularly. Under this treatment the

5. Dawson, M. H.; Hobby, G. L., and Lipman, M. O.: Penicillin Sensitivity of Strains of Nonhemolytic Streptococci Isolated from Cases of Subacute Bacterial Endocarditis, Proc. Soc. Exper. Biol. & Med. **56**: 101, 1944. Watson, R. F.: Sensitivity of Various Serological (Lancefield) Groups of Streptococci in Penicillin, ibid. **57**: 65, 1944.

temperature gradually declined, although slight elevations persisted. Her general condition improved greatly and she felt quite well. It was impossible, however, with these dosages to obtain consistently negative blood cultures; for the most part they yielded 1 to 6 or 8 colonies per cubic centimeter. Subsequent sensitivity tests on three isolations showed growth to be inhibited by 0.1, 0.2 and 0.4 unit per cubic centimeter. In summary, then, this is an instance of S. viridans infection which we could not extirpate with "standard" intensive penicillin therapy. This failure was probably due to high resistance of the strain; not only this, but the organisms appear to have become more resistant under subcurative doses of penicillin.

The patient left the hospital on Dec. 16, 1944 and returned on Jan. 3, 1945 for further treatment (fig. 4). The temperature varied from 38.5 to 40 C. (101.3 to 104 F.). There was decided anemia with 66 per cent of hemoglobin, and blood culture January 4 yielded 115 colonies of nonhemolytic streptococci per cubic centimeter, which was not inhibited by 0.1 unit per cubic centimeter of medium. The physical signs were unchanged. It was decided to treat the patient with sulfadiazine and penicillin. Six Gm. of sulfadiazine was given daily from January 6 to February 16, when the dose was increased to 9 and then

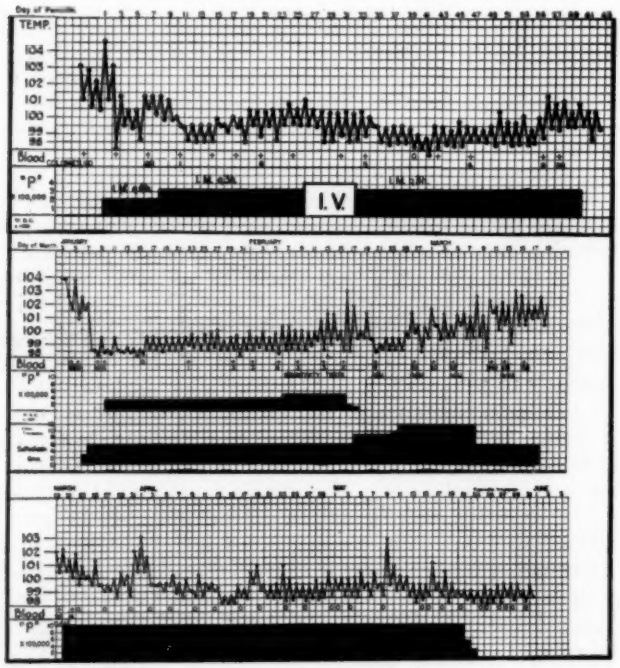


Fig. 4.—Course in case 4.

to 12 Gm. daily until March 8, when it was gradually reduced and finally stopped on March 19. Penicillin was started on January 10 at the rate of 320,000 units per day, 40,000 units intramuscularly every three hours. On February 8 this was increased to 480,000 units daily until March 16, when it was reduced for two days to 160,000 units and then stopped. Following the start of the treatment described there was a prompt fall of temperature to normal, where it remained for over a week (fig. 4). She felt much better and the blood culture showed fewer organisms (3 to 10 colonies per cubic centimeter). However, the blood stream did not become sterile, with the exception of one negative culture on January 15, and during February the temperature gradually rose in spite of continued therapy. During March it began to range as high as 39 C. (102.2 F.), and on February 26 blood culture yielded 50 colonies per cubic centimeter. To inhibit the organisms, 0.5 to 1.0 unit of penicillin per cubic centimeter of medium was now necessary.

It was clear therefore that while the aforedescribed procedure was followed at first by some clinical improvement and a reduction in the degree of bacteremia, she eventually "relapsed" in spite of treatment, with return of high fever and heavy bacteremia. Furthermore the strain of streptococcus seemed to become more resistant and required 1 unit per cubic centimeter of medium for inhibition, whereas at the start 0.2 unit was effective. However, on March 12 and 19 without further penicillin therapy the strain appeared more sensitive and required only 0.4 unit for complete inhibition (fig. 4). It is possible, however, that these findings are not significant.

It was decided to make a more vigorous assault on the disease. On March 18 the sulfadiazine, which seemed to be entirely ineffective, was finally stopped and on the 20th penicillin was resumed by continuous intramuscular drip at the rate of 1,000,000 units in the twenty-four hours. This amount of penicillin was suspended in 500 cc. of isotonic solution of sodium chloride. There were some difficulties in regulating the flow, but from March 20 to April 16 she received 24 million units by this method. From April 18 on she received 125,000 units intramuscularly in 5 cc. of saline solution every three hours, 1 million units per twenty-four hours until May 22, a total of 33,750,000 units.

As soon as the large doses (1 million units per day) were started there was prompt improvement (fig. 4). The temperature declined and she felt better. One day after treatment the count in the blood culture fell to 4 colonies per cubic centimeter and from then on 20 cultures during the course of treatment were all sterile. She was discharged on May 31 feeling perfectly well and with essentially normal temperature. During the last part of her stay a number of bad teeth were removed without ill effects. The physical signs over the heart were unchanged, but there was no evidence at all of cardiac failure.

Measurements of the level of penicillin in the blood after intramuscular injection of 125,000 units showed about 0.2 unit per cubic centimeter at the end of three hours. Hence there was an effective level most of the time.

Last follow-up three months after leaving the hospital showed that the patient was clinically well with no evidence of infection and negative blood cultures.

In summary, then, a patient with bacterial endocarditis whose strain was moderately insensitive was not cured or rendered bacteria free by rather large doses of penicillin and sulfadiazine given over a period of some three months. Indeed, after initial improvement she seemed to "escape" from the effects of the drugs and her strain was found to be more resistant than at the start. The strain seemed to become more sensitive after penicillin was stopped, and then very heavy penicillin therapy appears to have been effective in eradicating the infection.

The chart shows clearly the lowering of temperature and decrease in number of colonies in the blood stream with subcurative doses of penicillin. We believe, on the basis of the work of Beeson, Brannon and Warren, who showed the remarkable constancy of colony counts on successive blood cultures in untreated cases, that the trend of quantitative blood cultures is of great importance in evaluating the effect of therapy.

It is clear then that the sensitivity of the strain must be taken into account in planning therapy, and with strains which are more resistant than usual very large doses of penicillin may be necessary to accomplish a cure.

ALTERATIONS IN RESISTANCE OF STREPTOCOCCI UNDER TREATMENT

The possibility of bacteria of all sorts becoming resistant to penicillin by exposure to sublethal doses has been demonstrated both experimentally and in the clinic.[6] There is good reason therefore, in theory at least, for always giving intensive therapy in bacterial endocarditis. Case 4 is a clear instance of increasing resistance of streptococci under inadequate penicillin therapy, since the strain which at first was inhibited by 0.2 unit per cubic centimeter of culture medium later grew freely in this concentration and 0.5 to 1 unit was necessary

6. Spink, W. W.; Ferris, V., and Vivino, J. J.: Antibacterial Effect of Whole Blood on Strains of Staphylococci Sensitive and Resistant to Penicillin, Proc. Soc. Exper. Biol. & Med. **55**: 210, 1944.

completely to prevent growth. It is of interest that the resistance of this strain was higher when the dosage of penicillin was inadequate than it was after penicillin was stopped altogether. However, the change may have been within the limits of error of the method. In cases 1 and 2 subcurative doses of penicillin did not seem to lead to alteration of sensitivity of the strain.

FAILURE OF TEMPERATURE TO FALL UNDER PENICILLIN THERAPY AFTER THE BLOOD STREAM HAS BEEN STERILIZED

One of the most troublesome problems in the treatment of bacterial endocarditis has been persistence of fever for long periods even though blood cultures have become sterile under penicillin therapy. We have encountered this state of affairs in a number of our cases and the interpretation has been extremely difficult. Is persistent fever simply due to inadequate treatment? Does it indicate disintegration and absorption of large vegetations? Is it the result of some unrecognized complication? Is it caused by penicillin itself or by an impurity in the preparation? In case 9 of the series previously reported [1] the temperature did not begin to fall until the twenty-first day of treatment. The case here reported is an even more striking example of this problem:

CASE 5.—A man aged 47, who was said to have had rheumatic fever in childhood, was subject to palpitation and dyspnea for many years. Three months before examination he had a stroke with left-sided weakness, and for the past three weeks there had been chills and fever. On entry the heart was enlarged, the rhythm totally irregular. There were the signs of aortic stenosis and insufficiency and possible mitral stenosis. The spleen was palpable. Blood culture yielded a nonhemolytic streptococcus which was inhibited by 0.05 unit of penicillin per cubic centimeter. As the patient was not in cardiac failure it was decided to try penicillin. Treatment was started on Dec. 29, 1944 in doses of 50,000 units intramuscularly every six hours, or 200,000 units per day (fig. 5). Blood cultures promptly became negative, but the temperature did not subside and indeed after two weeks was higher. The dose was therefore increased on the twenty-seventh day to 30,000 units every three hours, or 240,000 units per day. However, the fever continued and on the fortieth day penicillin was stopped to make sure that fever was not caused by an odd reaction to the material. However, the temperature did not fall during a four day period without penicillin, so it was resumed and continued until the sixty-fifth day. It was not until about the fiftieth day that the temperature definitely began to fall, and at the end of the treatment period it was nearly normal. During the last week in the hospital after penicillin was stopped the temperature rose only to about 37.5 C., or 99.5 F. (rectal). On approximately the thirtieth day of treatment he developed pain in the right side and a friction rub, evidently from pulmonary infarct. This cleared up in a few days and no other complication was recognized. The explanation of the persistence of fever for such a long time is not clear. This patient was seen three weeks after discharge. He had no signs of infection or cardiac failure and the temperature was normal. Follow-up study six months after discharge shows no evidence of infection, blood cultures are negative, and temperature is normal.

In this case the prolonged fever was not explained. It did not seem to be due to reactions to penicillin, to penicillin impurities, to inflammatory complications or to persistence of active infection. The ultimate drop in temperature suggests that disintegration and absorption of masses of vegetation was going on, and under these circumstances it is possible or indeed probable that bacteria still persisted in the lesions in spite of the blood cultures being sterile. Continued fever seems, therefore, to be an indication for prolonged therapy, and the event in this case supports this position.

CARDIAC FAILURE

Every one who has discussed the use of penicillin in bacterial endocarditis has agreed that cardiac failure is in a sense a contraindication to treatment. Decompensated patients are less likely to profit by extirpation of the infection than those with good hearts, and failure may actually become worse under therapy. Case 3 illustrates the development of congestive failure during the course of penicillin therapy. On entry there was no sign whatever of cardiac failure and the heart did not seem to be enlarged. On the forty-fifth day of treatment at a time when the temperature was normal and the patient seemed to be doing very well he had a bout of transient auricular fibrillation. From this time on there were various arrhythmias and finally frank congestive failure. A few days before death cardiac enlargement, gallop rhythm, edema of the lungs and engorgement of the liver were noted. Death was clearly due to a cardiac accident.

Cardiac failure of some extent occurred in 8 of our entire series of 21 cases. In 4 frank failure, serious disturbances of rhythm or cardiac accident (coronary embolus?) were noted. In the other 4 there was no frank failure but there was a definite lowering of cardiac reserve after the conclusion of therapy.

What is the explanation of this high incidence of cardiac difficulties? First of all one may say that heart failure is less likely to occur if the initial anatomic

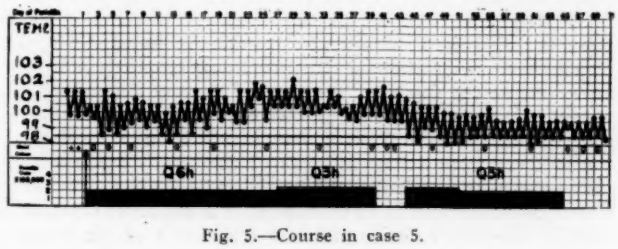


Fig. 5.—Course in case 5.

valve lesion is insignificant. But there is no absolute rule about this. C. B., for example (case 3 in the previous series [1]), with an old mitral lesion apparently of slight degree, did not have any symptoms of failure before the onset of bacterial endocarditis, and the infection was promptly cured by penicillin. None the less he developed tachycardia with definite deterioration of cardiac function followed in a few months by congestive failure. Such failure is probably not due purely to the lesion which was present before the bacterial implantation. In other words there is no reason to believe that such a high percentage of patients with uncomplicated cardiac lesions would develop failure in so short a time. On the other hand it is also improbable that the mere presence of infection would induce cardiac failure so commonly even if one admits the frequency of myocardial lesions in bacterial endocarditis, as pointed out by some pathologists.[7] We are inclined to think that the anatomic changes produced by penicillin therapy in valves the seat of vegetative endocarditis may promote cardiac failure. This view is supported by autopsy on a treated case with mitral stenosis in which the valves, while in a sense healed, were reduced to shrunken vestiges following absorption of the vegetations. In other words, one faces the paradox that elimination of infection is associated with further destruction of valves in certain cases. This conclusion of course in no way weakens the imperative indication for penicillin therapy;

7. Saphir, O.: Myocardial Lesions in Subacute Bacterial Endocarditis, Am. J. Path. **11**: 143, 1935.

it does emphasize the importance of recognizing the active infection and starting therapy as early as possible, before valves have been extensively affected. Further experience of sufficient extent to allow statistical conclusions will be very important.

CARDIAC ARRHYTHMIAS AND ACCIDENTS

Quite aside from congestive failure, accidents and disturbances of mechanism have been very frequent. The accompanying table summarizes all the cardiac complications in our patients, and the following case illustrates more in detail the occurrence of a cardiac accident and disorders of rhythm under treatment:

CASE 6.—A man aged 27, a draftsman, had been well until about three weeks before entering. He then noticed constricting pain in the chest, fever and malaise. Blood culture was found to be positive and he was sent in for penicillin therapy. There was no definite history of rheumatic fever but a vague story of "heart trouble" years before. On examination his general condition seemed good. There was a loud, rough systolic murmur at the aortic area and over the heart in general. There was no clubbing, and no petechiae. The liver and spleen were not felt. There was high irregular fever, and second and third cultures were positive for nonhemolytic streptococci—a few colonies per cubic centimeter completely inhibited by 0.05 unit of penicillin per cubic centimeter of medium. The patient seemed the ideal case for penicillin therapy and treatment was started on March 3, 1945 at a rate of 320,000 units per day in eight doses by intramuscular injection. This treatment was continued for sixty days. Blood culture two days after the start of therapy was negative, as were eighteen subsequent blood cultures both before and after treatment. As far as elimination of infection was concerned, treatment was promptly effective. However, on the day after the start of therapy the patient had violent pain and electrocardiographic evidence of coronary occlusion (perhaps embolic from a bit of vegetation). During his course there were numerous bouts of disturbed cardiac mechanism—auricular fibrillation, flutter and extrasystoles, often with fever. Some of these bouts were thought to be due to pulmonary emboli. However, during the last few weeks of his hospital stay he was quite well (with practically normal temperature) except for a few brief paroxysms of auricular fibrillation. Electrocardiograms are shown in figure 6.

The patient seemed cured of the bacterial infection but remained a cardiac problem not because of his old valve lesion (aortic stenosis) but because of cardiac infarction and arrhythmias. He was seen frequently after leaving the hospital, and a number of blood cultures, the last one three months after the conclusion of treatment, were all sterile. He continues, however, to have occasional bouts of cardiac arrhythmia.

Cardiac Complications During Penicillin Therapy

	Number	Per Cent
Total patients treated with penicillin	21	..
Total number with cardiac complications other than old (valve) lesions	10	47
Number showing evidence of failure before treatment was started	2	..
Number developing congestive failure during or shortly after treatment	5	24% of whole series
Number developing mild impairment of function	3	..
Number developing tachycardia or arrhythmia (flutter, fibrillation and so on) during treatment	5	..
Anginal pain	1	..
Coronary embolus?	1	..
Block of coronary orifice?	1	..

In summary it seems quite clear that the patients in this series had an unexpectedly high incidence of cardiac failure and of disturbances of mechanism. Since only 2 of them showed evidence of failure before treatment was started, the question is open as to whether alterations in vegetations and in valves as a result of penicillin therapy may on occasion promote these disturbances. It is noteworthy that the 2 patients who had the most serious complications had what appeared to be simple lesions of no great extent when treatment was started (cases 3 and 6).

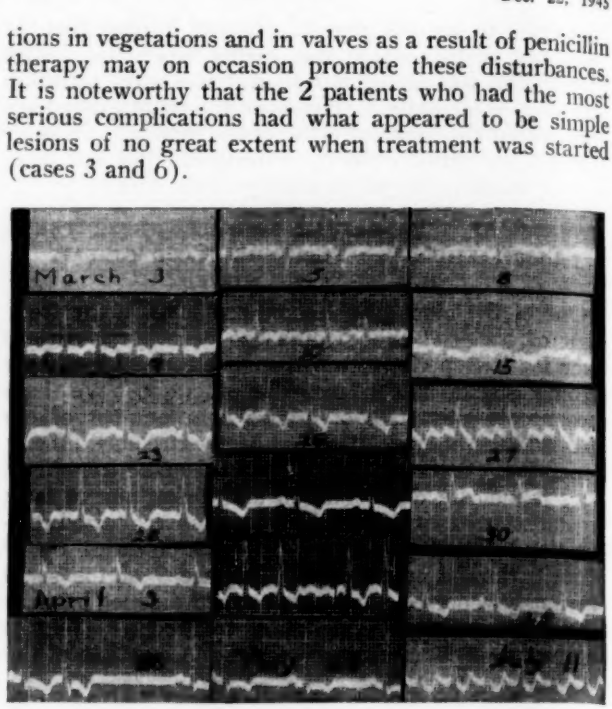


Fig. 6.—Electrocardiograms from case 6:
March 3, lead 1, RS-T slightly depressed.
March 5, lead 1.
March 8, lead 1, changes in T waves have progressed.
March 9, lead 1, auricular fibrillation; further change in T waves.
March 10, lead 3, auricular fibrillation continues.
March 15, lead 1, sinus rhythm; further changes in T waves.
March 23, lead 1, progression of T wave changes.
March 26, lead 1, auricular fibrillation.
March 27, lead 2, auricular flutter, 3:1 block.
March 28, lead 2, auricular fibrillation.
March 29, lead 1, sinus rhythm; compare T waves with those of March 3 and 5.
March 30, lead 3, shows very deep Q wave.
April 3, lead 3, Q wave has disappeared and T wave has changed.
April 21, lead 2, auricular fibrillation.
April 25, lead 1, sinus rhythm.
April 26, lead 1, extrasystoles.
May 28, lead 1, further changes in RS-T segment.
July 11, lead 2, auricular (or nodal) tachycardia.

COMMENT

The entire question of recovery in bacterial endocarditis has, in the past, been in a state of confusion. Thus, in the literature one encounters the designations cured, healed, bacteria free, active, inactive, recovered and intermittently active. Most of these terms express perplexity on the part of the observer as to the exact status of his patient. Libman,[8] following Harbitz,[9] pointed out years ago in autopsy material the frequency with which portions of the lesion seemed to be healing even as the process progressed elsewhere. Part of a valve might, for example, show flat organized or even calcified plaques, whereas not far away the lush vegetations typical of active infection would be found. In many of Libman's cases the cardiac lesions at autopsy are described as being completely healed, and it appears that usually no bacteria could be seen in sections of the valves. More recently Hamman[10] has pursued the subject. Some of his patients had lesions which anatomically appeared healed and showed only fibrosis and calcification, without fresh vegetations. The striking thing, however, about the patients of Libman, Hamman and others is that the "spontaneous" healing which they describe came too late to serve any useful purpose, since the patients died of irreversible lesions of kidney, bone

8. Libman, E.: A Study of the Endocardial Lesions of Subacute Bacterial Endocarditis, Am. J. M. Sc. **144**: 313, 1912.
9. Harbitz, F.: Studien über Endocarditis, Deutsche med. Wchnschr. **25**: 121, 1899.
10. Hamman, L.: Healed Bacterial Endocarditis, Ann. Int. Med. **11**: 175, 1937

marrow and so on. We are confronted therefore with the paradox of a disease which always kills and yet often reveals to the pathologist a healing lesion. We conceive that penicillin therapy hastens and abets this natural tendency to healing to a degree which makes clinical recovery possible. From the nature of the case, however, considerable time is necessary for the absorption and organization of vegetations, and the cocci must be gradually "dug out of their fox-holes" and destroyed in order to prevent progressive damage. No matter how large a daily dose of penicillin is given, it seems improbable that complete healing of extensive vegetations could take place in two or even three weeks; bacteria may be killed off in the superficial parts of vegetations, but relapse would be expected as the organisms work out of the deeper layers, and indeed this is exactly what seems so often to have taken place with inadequate therapy.

This position is strongly supported by the autopsy findings in 1 of our cases (previously reported as case 2 [1]) apparently cured by penicillin, but ending in death later of heart failure. The anatomic findings corresponded closely with those which have been described in the cases with spontaneous healing, except that they are more complete and uniform. All the vegetations had disappeared, leaving shrunken valves with flat scarred and calcified plaques. Even so a few cocci could still be seen in sections made from the depths of the valves.

SUMMARY

The cases herewith presented show that while the treatment of subacute bacterial endocarditis with penicillin yields on the whole remarkably good results, a number of problems and difficulties still remain, among which the following are outstanding:

There appears to be a correlation between strain sensitivity in vitro and the clinical response. If the organisms require more than 0.1 unit of penicillin per cubic centimeter of medium for complete inhibition of growth the case is likely to be refractory to the amount of treatment usually given and doses up to 1 million units per day may be necessary to extirpate the infection. Sensitivity tests are essential to the intelligent treatment of these cases.

The entire matter of optimum time-dose relationships is still under investigation. The cases show that to obtain the most secure results treatment should be continued for a long period—probably at least two months—but even long continued treatment is ineffective if the daily dose of penicillin is too small and/or the number of injections too few. Subcurative therapy may produce deceptive pseudocures with disappearance of symptoms, drop in temperature and sterile blood cultures, but with return of bacteremia as soon as treatment is stopped.

Increased resistance in vitro of a strain of streptococcus from a case inadequately treated occurred. The patient was cured by large doses of penicillin (1 million units per day). The practical importance of development of refractory strains from patients with bacterial endocarditis is not yet clear. Unexplained fever may persist for a long time under treatment even though blood cultures are sterile and the patient is evidently cured.

A disturbingly high incidence of cardiac complications (aside from the original lesion) including congestive failure, mild impairment of function, arrhythmias and coronary accidents occurred in this series. The deformities and destruction of valves which seem to go hand in hand with the absorption of vegetations under penicillin therapy may account for some of these disorders.

TRANSMISSION OF POLIOMYELITIS BY PATIENT TO PATIENT CONTACT

ALBERT E. CASEY, M.D.
BIRMINGHAM, ALA.
AND
WILLIAM I. FISHBEIN, M.D.
UNDER THE DIRECTION OF
HERMAN N. BUNDESEN, M.D., Sc.D.
CHICAGO

For some years Dr. Herman N. Bundesen, chairman of the Epidemic Committee of the National Foundation for Infantile Paralysis, Inc., has believed that a coordinated and systematic field study of the epidemiology of poliomyelitis should be undertaken by a single group of well trained persons over an extended period. The opportunity for the beginning of such a study presented itself in the summer of 1945 when a special survey of poliomyelitis was organized in Chicago.[1] A case finding program was undertaken to (*a*) establish, if possible, the amount of unrecognized poliomyelitis in urban communities, (*b*) determine the relative incidence of the paralytic and nonparalytic forms of the disease, (*c*) investigate contact between cases in the spread of urban poliomyelitis and relate this, if possible, to the various age groups, (*d*) evaluate the roles of the nose, throat, mouth and feces, if any, in the transfer of the virus from one patient to another and (*e*) detect the presence or absence of perennial geographic foci of the disease in the city of Chicago.

Certain observations on the incubation and infectious periods in poliomyelitis first made in Walker County, Ala., in 1941 [2] have since been confirmed.[3] These were that the infectious period in the great majority of those cases studied is three days before or three days after the onset of the prodromal period and that the incubation period (from exposure to the onset of the prodromal period) is from four to thirty-five days, averaging twelve days. A further observation made in Walker County, for which confirming evidence hitherto has not been noted, was that the transmission of the disease could be established as at least 80 per cent patient to patient contact, whether through the mechanical use of hands, mouth, nose, insect or other methods. It seemed that insects played a minor part, if any. These observations

From the laboratories of the Chicago Health Department and the Birmingham Baptist Hospitals.

1. The field work (case finding program) was supported in part, by a grant from the Cook County chapter of the National Foundation for Infantile Paralysis. This chapter, through the efforts of Dr. Morris Fishbein, agreed to contribute a portion of its local funds for this purpose. The entire facilities of the Chicago Health Department were made available, and an executive committee was appointed consisting of Dr. Herman N. Bundesen, president of the Chicago Board of Health, chairman; Dr. William I. Fishbein, epidemiologist of the Chicago Health Department, and Dr. Morris Fishbein, editor of THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION. Dr. George W. McCoy, professor and director of the department of preventive medicine and public health at Louisiana State University, was appointed chairman of the advisory committee. The remainder of the advisory committee included Dr. John L. White, chief sanitary officer of the Chicago Health Department; Dr. Howard J. Shaughnessy, director of the Illinois State Bureau of Laboratories; Major Joel I. Connolly, assistant to the president of the Chicago Board of Health; Dr. Sidney O. Levinson, director of the Samuel Deutsch Serum Center of Chicago, and Dr. A. L. Hoyne, superintendent of the Chicago Municipal Contagious Disease Hospital. Dr. Albert E. Casey was asked to draw up a plan for the Chicago studies similar to that used by him in Walker County, Ala., in 1941 and to map out a coordinated research plan. This plan, with some modifications made by the personnel of the Chicago Health Department, was accepted by the executive committee and approved by the advisory committee and two co-chairmen of the Cook County chapter of the National Foundation for Infantile Paralysis, Col. A. A. Sprague and Britton I. Budd.

2. Casey, Albert E.: Observations on an Epidemic of Poliomyelitis, Science **95**: 359-360 (April 3) 1942; The Incubation Period in Epidemic Poliomyelitis, J. A. M. A. **120**: 805-807 (Nov. 14) 1942; Place of Contact and Radial Spread of Epidemic Poliomyelitis, Am. J. Dis. Child. **69**: 152-156 (March) 1945.

3. Aycock, W. L.: Personal communication to the authors. Krause.[6]

on patient to patient contact were made in a rural area during a severe epidemic (Alabama, on the basis of case reports, was the most intensively affected state in the Union in 1941 and Walker County the area of highest concentration of reported cases) and would indicate that the disease is highly contagious. Chicago in 1945 presented an unusual opportunity to test the same methodology in the study of the disease in a large urban community during a nonepidemic year.[4]

This paper, therefore, reports investigations of patient to patient contact and observations on the incidence of usually unrecognized cases of poliomyelitis of various types. Because more weight is likely to be given to investigations in neighborhoods where paralytic poliomyelitis was present, this report is limited to three patient neighborhoods wherein resided 7 patients with paralytic poliomyelitis (and their respective control neighborhoods).

MATERIALS AND METHODS

When a case or suspected case of poliomyelitis was reported to the Chicago Health Department, a history was immediately taken and a physical examination made by the pediatrician experienced in the diagnosis of poliomyelitis, who participated in the study. If positive or suggestive of poliomyelitis, the patient was transferred to the Municipal Contagious Disease Hospital or to a private hospital properly equipped to handle poliomyelitis, where spinal puncture and confirming examinations could be made without jeopardy to the patient. When the diagnosis was confirmed, a neighborhood investigation was undertaken by the staff of trained investigators to determine if any other cases were present in the neighborhood; if any were found, they were included in this study. The patient's neighborhood was defined as that block or area within one block radius of where the patient resided during the infectious period. A census was taken of all persons under 25 years of age in the neighborhoods studied, and the chronology and symptomatology of all illnesses from June 15 (when the study was started) to date were noted on each person in that age group. A casual but not detailed inquiry as to febrile illnesses prior to June 15 was obtained, and a casual survey of the neighborhood and premises as to the disposal of feces, the water supply, sewerage, garbage disposal, flies and other insects was made, but nothing unusual was found.

When a case of poliomyelitis was present in a neighborhood, careful, detailed checked and rechecked histories of the playing habits, visits and housing of all persons under 25 years of age were compiled, especially with reference to the period three days before and three days after the onset of the prodromal period in the patient and in other persons in the neighborhood who had illnesses compatible with poliomyelitis. Although most of the children in a block had been with one another at some time after June 15 in the neighborhoods studied, only a portion of these, as far as could be ascertained, had associated with the patient during the period described and defined in this study as the infectious period.

Those persons who were closely or intimately associated in play or otherwise with the patient for a total period of more than ten minutes during the infectious period were defined as contacts in this study. Those persons living in the same or adjoining blocks who were not associated for this length of time with the patient during his infectious period or with any other person with an illness seemingly compatible with poliomyelitis during his infectious period were defined as noncontacts (even though these persons may have played with the patient at some prior or subsequent period). Most of the noncontacts were children on the street across the alley from the patient, or in a block distant or across the street from the patient, although in some instances there was no evidence that even next door neighbors associated with the patient during the infectious period. Evidence on these points of association was obtained from the children themselves rather than relying principally on the statements of the adult population. The chronology was checked and rechecked for accuracy.

As an epidemiologic control, a collateral investigation was made in a neighborhood ten or fifty blocks distant from the patient's residence, depending on the location in the city, where there were no known cases of poliomyelitis. In all but one instance these control areas were at least one-half mile away from any known case of poliomyelitis. The distances were rotated north, south, east and west so that equal numbers of controls were located in the four parts of the city. The same census of persons under 25 years of age, the same investigation as to illnesses and visits, playing habits and sanitary conditions was made as in the poliomyelitis patient's neighborhood. Minute details of the minor illnesses were obtained and checked by the field epidemiologist (and by the pediatrician as indicated). Persons under 25 years studied in these control neighborhoods were designated in this study as controls.

Daily temperatures, nose, mouth and throat swabs and daily stool specimens were obtained from 6 persons in each neighborhood where there was a case of poliomyelitis and in each control neighborhood. These persons were generally those who had had a history of no prior illness since June 15. In the patient's neighborhood, 4 or 5 of the 6 were usually contacts and 1 or 2 noncontacts. Also 4 of the 6 were usually between 1½ and 9½ years of age, 1 between 10 and 15 and 1 between 15 and 24. The children selected as contacts were those most closely in contact with the patient when such children could be enlisted in the study. The purpose of this procedure was to attempt to have stool, throat, mouth and nose specimens on children who subsequently came down with clinical or subclinical poliomyelitis. In this way it was hoped to obtain information on the presence of the virus in the body during the late incubation period. To carry out this phase of the study it was necessary to have the disease reported to the epidemiologist promptly, so that the intimate contacts of the patient and a set of controls could be enlisted in the study within six days after the onset of the prodromal period in the patient.

Often it was discovered that the case first reported was not the first case of poliomyelitis in the neighborhood. When a good history of a febrile illness compatible with poliomyelitis was obtained on a prior or subsequent contact, noncontact or control, the child was sent to the hospital when feasible and a spinal fluid examination made to aid in diagnosis. This was done in most of the children among the contacts, noncontacts and controls on whom daily thermometer readings were made and a temperature of 99.2 F. axillary on one day or 99 F. or more on several days was recorded.

4. The total number of cases of poliomyelitis in Chicago during 1945, up to November 18, was 233, with 19 deaths. Of these, 230 were hospitalized. In 1943 there were 998 cases and 87 deaths.

RESULTS

Many febrile illnesses, such as measles, mumps, pertussis, coryza, diarrhea, otitis media, vaccine reactions and other illnesses, were detected throughout the city, all in the neighborhoods studied during the summer and early fall. There was evidence that 2 cases of mumps and 1 of measles encephalitis were reported as poliomyelitis during the early phases of our study, but, of course, these are not included in the study. It is of interest to note that in 1 case of mumps encephalitis there was no evidence of parotitis or other local manifestation. This case may be made the subject of a separate report. None of these 3 cases presented paralytic poliomyelitis and it strengthened our decision to include in the study only the neighborhoods in which a paralytic case of poliomyelitis occurred. There was also found, as had been the experience in Walker County, Ala., an enormous variation in the abilities of nurses and physicians in history taking and the necessary detective work essential to establish the chronology or visits and illnesses in the child population. This first paper is limited to a report of those neighborhoods which were investigated and reinvestigated and had additional checks and rechecks by the most experienced and able of the personnel. There are, undoubtedly, uncontrollable errors, particularly of omission in the histories reported, but it is believed that the painstaking work has yielded a body of data of more accuracy than that often reported on experimental animals in laboratories, and better than the usual histories obtained under optimal conditions in some hospitals. In the meantime, a group of trained workers has obtained invaluable experience for further work in the future.

Since the animal inoculations will take considerable time, no report can be made for some time on the many specimens taken from nose, throat, mouth and stool which were collected during the incubation period in patients with febrile illnesses. Several of these were outright clinical cases of poliomyelitis with paralysis. The results of the daily temperature readings are not reported as such here, since this also will be the subject of another report. Suffice it to say that about 60 persons with febrile illness compatible with poliomyelitis were found in the day by day neighborhood studies.

Although investigations were made in the neighborhoods of 7 paralytic cases of poliomyelitis and 9 nonparalytic cases, presumably poliomyelitis, this preliminary report concerns only three patient neighborhoods wherein resided 7 paralytic patients and their respective control neighborhoods, because there has not been sufficient time to tabulate and study all of the data collected. However, we feel that the information is of sufficient importance to justify this preliminary report. Even here the date of reporting in the first case (also first of the 26 reported) was so close to the beginning of our study that much effort for a week or two was made in the training of nursing personnel in the collection of specimens and the taking of temperatures. From the fact that 3 of the paralytic cases were from one family, and 2 of the 4 other paralytic cases were from one side of the same block, it would seem that paralytic cases were more likely to occur in the neighborhood of another paralytic case than in the neighborhood of a nonparalytic case.

The data as to contacts, noncontacts and controls are presented for the neighborhoods of the 2 older patients not completely studied (table 1) [5] and for the Shaw and Yates avenue groups (tables 2 and 3). Data are available on the age, sex, color, onset of illness, presence of fever, headache, stiff neck or stiff back, sore throat, constipation, vomiting, paralysis or paresis, running nose, cough and diarrhea, together with the spinal fluid cells.

Cases in which these symptoms occurred together with spinal fluid protein of 45 mg. or more (indicative of poliomyelitis), or those with fever, headache, stiff neck or back and paresis or paralysis are listed as poliomyelitis and placed in group A. There were 24 children in this group with fever, 23 had spinal fluid examinations made and 22 had spinal fluid proteins of over 45 mg., indicative of poliomyelitis. The other child had a bloody tap, which made the fluid unfit for study, and in 1 person spinal tap was not permitted. The febrile illnesses studied were not colds. None of these 24 patients (group A) had a cough; 1 had running nose, and 2 had a slight diarrhea.

In classifying the remaining 266 children studied (including contacts, noncontacts and controls), those children without paralysis or paresis, that is, muscular weakness, who demonstrated either running nose, cough or diarrhea were eliminated from a second group of

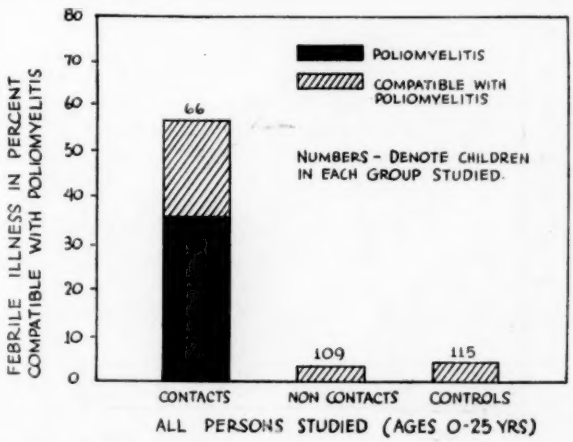


Chart 1.—Incidence of illness among contacts, noncontacts and controls.

children having illness compatible with poliomyelitis and were placed in group B. Into group C were placed children with mumps, pertussis, otitis media, vaccine reactions and indefinite illnesses accompanied by running nose, diarrhea or cough.

There were 224 children who were noncontacts and controls. No case of definite poliomyelitis developed among any of these noncontacts or among the controls (table 4). There were four minor illnesses of the subclinical variety considered compatible with poliomyelitis but not diagnosed as such. There was no difference, as far as incidence of poliomyelitis or febrile illnesses compatible with poliomyelitis is concerned, between the children in the same block as the patient who were noncontacts and the control children who lived ten to fifty blocks distant (chart 1). Yet the noncontact children in the same block as the poliomyelitis cases were exposed to the same flies or other insects, water, milk and other food supplies as the patients and contacts. On the other hand, in addition to the 24 cases of poliomyelitis among the 66 contacts, 13 children, or 20 per cent of the contacts to poliomyelitis cases, developed febrile illnesses which, although not definitely clinical poliomyelitis, were compatible with this disease (chi square = 87.3; N. = 1; P. = 0.001 —, significant). These differences were true for

5. Tables are included in reprints, which will be sent on request.

each of the three neighborhood groups studied both as to the incidence of frank poliomyelitis and as to the incidence of minor illnesses compatible with poliomyelitis (table 4).

When the incidence of febrile illness compatible with poliomyelitis and the cases of definite poliomyelitis in contacts, noncontacts and controls were plotted according to age groups, no peak occurred among the noncontacts and controls, whereas there was a sharp peak among the contacts, reaching 90 per cent in the 1½ to 3½ age groups, tapering off with the older groups (tables 4 and 5, chart 2). No poliomyelitis or illness compatible with poliomyelitis was recognized in any child under 1½ years of age whom we studied.

COMMENT

The incidence of febrile illnesses compatible with poliomyelitis among contacts in the 1½ to 3½ age group is about the same as that observed in Walker County, Ala., in the epidemic of 1941. However, the tapering off of the curve was less definite in the Chicago area than was noted in Alabama. This might indicate that the children in Walker County, Ala., were more

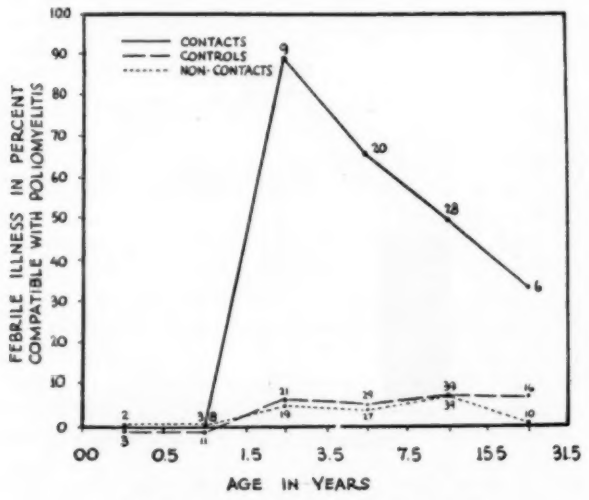


Chart 2.—Illness according to age groups.

commonly exposed to infantile paralysis in the younger age groups than was the case in Chicago or that more detailed studies of indefinite illnesses in the older children were employed in Chicago, bringing more cases of poliomyelitis to light.

The apparent contagiousness of poliomyelitis in an epidemic year in a rural community compared with a nonepidemic year in a large modern city would seem to demonstrate that poliomyelitis is a very contagious disease among young children. Presumably the older children may have actually had the disease or may have developed an immunity in some other way.

It should be pointed out that of the 24 children diagnosed as having poliomyelitis and having spinal fluid findings, such as elevated protein, sufficient to confirm a profound reaction in the central nervous system, 7 were paralytic. If to these 24 are added the 13 other children living in the same block, exposed to poliomyelitis and developing a minor illness compatible with poliomyelitis, 1 child in 6 who develops poliomyelitis may be expected to have paralysis. Fourteen of the 37 (38 per cent) developed stiff neck or stiff back recognized by history or physical examination after an intensive study.

Until some method of diagnosis, such as a serologic or other inexpensive laboratory test, is available, perhaps it would be well to make a definite diagnosis of poliomyelitis in those children with no paralysis only if they have fever, spinal fluid protein over 45 mg. and were contacts living within a block of a paralytic case of poliomyelitis. This might obviate the mistaken diagnosis of poliomyelitis in other virus diseases, such as mumps, which may closely simulate poliomyelitis. In addition, it would help lead to a diagnosis in most of the 62 per cent of subclinical cases of poliomyelitis not now recognized or reported as such. Since many of those listed as minor illnesses compatible with poliomyelitis were children without spinal fluid protein determinations, and since in another publication it will be reported that the spinal fluid protein is high in these children with minor illnesses, compatible with poliomyelitis, three to six weeks after the onset of illness, spinal fluid examinations could be more widely used in clinical practice by hospitalizing suspects in a hospital where the tests can be adequately performed.

The possibility that the daily visits by our nursing personnel may have introduced the virus can be dispelled by studing the dates of onset (tables 1, 2 and 3). At the time our studies were instituted, 24 of the 37 children had already developed their febrile illness and all who were going to come down with the disease had already been exposed. It is possible that the intensive study actually limited the spread, and there is no evidence to support the presumption that a single case in the groups herein reported was brought in by the medical personnel. Needless to say, unusually strict and careful technics were employed. These will be more fully explained under the virus studies now in progress, and it should be pointed out that stool, nose, throat and mouth specimens are available on nearly all of the children herein reported.

This study throws some light on the possible role of insects as against human contact in the spread of poliomyelitis. It is believed that these studies point to which of these two is the major role involved once the virus is introduced into the neighborhood. Of the noncontacts living in the same block as the patients, none developed poliomyelitis and there were no more minor illnesses compatible with poliomyelitis than were found in the control neighborhoods ten and fifty blocks distant. On the other hand, 20 per cent of the contacts developed the disease. The studies would indicate that poliomyelitis for children 1½ to 3½ years of age is as contagious as measles, mumps or other better known contagious diseases. There were flies of the orange and green variety seen about garbage cans in the alleys of Chicago during the summer of 1945, but there was no significant difference between the presence of these flies in poliomyelitis neighborhoods and in the control neighborhoods where the disease did not appear. In fact, the two neighborhoods where most of the patients with poliomyelitis in this study resided were almost entirely free from flies and had cement garbage disposal boxes and the latest fecal disposal systems and sewerage. Again it would attribute too much intelligence to the fly and other insects to select in a given block only those children who had been in contact with the patient during the infectious period, to transmit the disease, and intelligently avoid those children in the same block who had not been in contact with the patients. Such an assumption would seem to carry insect intelligence too far.

The following case histories indicate the relationship of various cases of poliomyelitis to one another:

In the Shaw neighborhoods a boy aged 9½ years (TARoIsa, table 2) attended a summer camp in Wisconsin in the last week of June, returned home on July 8, became ill on July 15 at his home, and there exposed on that day his 10 year old first cousin (TAPaSha, table 2) who played with him that day but who was not with him before or after or within 3 miles of him during the rest of the summer. The ten year old cousin went back home to her neighborhood and became ill eight days later. Four and five days after her onset and seven and eight days after exposure to her during her assumed infectious period her 2 sisters (TAKaSha and TAJeSha) became ill. Playmates of the 2 sisters (TAChOrr and TADoNei) became ill with poliomyelitis twelve and thirteen days later. On the day that her 2 sisters were becoming ill (July 27) a younger brother, William (TAWiSha), aged 7 years, and a young nephew, Leonard (TALeLaf) 1½ years, who had spent the entire summer before and after this time with the grandparents in a still different part of Chicago, visited the Shaw home on July 27 when the 2 sisters were in their most infectious period and played with these 2 for a period of hours, hugging and kissing them. Nine days later William and ten days later Leonard became ill with poliomyelitis, William being paralytic and Leonard having an illness detectable only by daily temperature thermometer readings and a spinal fluid examination.

Similar relationships existed in the other neighborhood intensively studied, in which the first child (TADiKaw), aged 7 years, became ill on July 22, and 6 of her contacts became ill between August 1 and 6, which was ten to fifteen days later. Children exposed to these contacts became ill eleven to seventeen days later.

Making the most of fragmentary or indirect evidence, many workers had been successful in approximating the incubation[6] and the infectious[7] periods in poliomyelitis and had concluded that the disease was contagious.[8] However, it was not until the fortuitous occurrence of an intense rural epidemic that sufficient direct evidence could be compiled.[2] These observations were quickly confirmed as to the incubation and infectious periods,[9] but the 80 per cent patient to patient contact rate noted in Alabama has not been duplicated except in the Chicago studies here reported. In fact, studies generally have not shown a patient to patient contact rate in poliomyelitis of more than 15 to 30 per cent.[10] The difference lies perhaps in the painstaking detective work on and the carefully prepared histories of minor illnesses not hitherto catalogued as poliomyelitis but most of which in the present studies were checked by either daily thermometer readings or retrospective spinal fluid examinations or both. There was almost no necessity to assume, in either Walker County or Chicago, that poliomyelitis had been transmitted through persons not clinically ill with the disease.

6. Krause, P.: Zur Kenntnis der westfälischen Epidemie von akuter Kinderlähmung, Deutsche med. Wchnschr. **35**: 1822-1825, 1909. Aycock, W. L., and Luther, E. H.: The Incubation Period in Poliomyelitis, J. Prev. Med. **3**: 103-120 (March) 1929.

7. Perkins, J. E.: Apparent Spread of Poliomyelitis Through Four Families, Minnesota Med. **24**: 924-935 (Nov.) 1941. Aycock and Luther.[9]

8. Wickman, I.: Acute Poliomyelitis, translated by J. W. Maloney, Nervous and Mental Disease Monograph Series, No. 16, New York, Journal of Mental Disease Publishing Company, 1913.

9. Aycock, W. L.; Kessel, J. F., and Gordon, J. E.: The Infectious Period of Poliomyelitis and Virus Detection, Am. J. M. Sc. **205**: 454-465 (March) 1943. Aycock.[3]

10. Maxcy, K. F.: A Review of the Epidemiology of Acute Anterior Poliomyelitis, with Reference to the Mode of Transmission, Journal-Lancet **64**: 216-223 (July) 1944.

SUMMARY

Among 66 persons in contact with poliomyelitis cases during the infectious period, 37 developed illnesses within six to fifteen days afterward which were compatible with poliomyelitis, and 24 were definitely diagnosed as poliomyelitis. Among 109 other children of the same age, who resided within the one block of the patient but who had not been in contact with the patients during the infectous periods, 4 developed illnesses compatible with poliomyelitis and not one was a clinical case.

Among 115 children in control neighborhoods of the same age as the contacts and noncontacts but who lived ten and fifty blocks distant from the poliomyelitis neighborhood and who were apparently without contact with a clinical case, 5 developed illnesses compatible with poliomyelitis and not one was a clinical case. There was no statistically significant difference between the noncontacts and the controls in this respect, but a highly significant difference between these two groups and the contact group.

CONCLUSIONS

1. Multiple cases of poliomyelitis in the family were the rule rather than the exception when there were other children from 1½ to 8½ years of age in the home.

2. Poliomyelitis was found to be contagious perhaps to the degree of 90 per cent in the 1½ to 3½ age group but less infectious in the older groups.

3. There was no evidence that flies and other insects played a major role in the spread of the disease in the neighborhoods studied, once the disease had been introduced.

4. Only about 1½ out of 6 instances of poliomyelitis would have been diagnosed as such, even under an alert public health reporting system, without an intensive neighborhood study. Illness in the other cases of poliomyelitis was so mild in most instances that a physician was not consulted.

5. Paralysis developed in about 1 case in 6, and about 2 in 6 could be confirmed only by animal inoculations or by spinal fluid protein examination done two to seven weeks after onset.

6. Poliomyelitis in the cases studied was usually a very mild condition, but in every instance there was sufficient systemic disturbance to account for a thorough immunization. Even in the mildest cases the spinal fluid protein was elevated above 45 mg. two to six weeks after onset.

7. Earlier observations by Casey, Aycock, Kessel and Gordon on the infectious and incubation periods are confirmed, and the original high percentage of patient to patient contacts noted in a rural epidemic have been substantiated by finding the same conditions in a large urban area like Chicago in a nonepidemic year.

8. Present methods and criteria for the diagnosis of the disease must be revised.

Virus Survival.—Control of virus disease in the future, as in the present, must depend wholly on an accurate understanding both of the mode by which the virus survives and of the process by which symptomatic disease is produced. When such knowledge is available, it is usually possible to see either that effective action can be taken at some point in the life history of the virus to eliminate the chance of human infection or that the virus cannot be dealt with in this fashion. In the latter case, the aim changes to that of preventing symptomatic infection after the virus has entered the body either by ensuring an immunological resistance through artificial immunization carried out before exposure to the virus or by other means still to be devised.—Burnet, Frank MacFarlane: Virus as Organism, Cambridge, Mass., Harvard University Press, 1945.

TREATMENT OF PREPARALYTIC POLIOMYELITIS WITH GAMMA GLOBULIN

ANNE M. BAHLKE, M.D.
AND
JAMES E. PERKINS, M.D.
ALBANY, N. Y.

By July of 1944 it was obvious that New York State was about to experience a major epidemic of poliomyelitis. Dr. John B. Alsever of the U. S. Public Health Service, temporarily assigned to the New York State Health Department in connection with the development of its plasma program, saw in the situation an excellent opportunity to study the possible therapeutic effect of the gamma globulin fraction of pooled plasma [1] in poliomyelitis. At that time collaborators of Enders [2] had already reported finding poliomyelitis antibodies in fraction II + III of human plasma in concentrations ten times as great as in whole plasma. Moreover, it was found that a number of other antibodies, similarly concentrated four to ten fold in fraction II + III, were associated with the gamma globulins, since they were further concentrated [2] fifteen to thirty fold over plasma in fraction II,[1] which contains 80 to 95 per cent gamma globulin in different commercial preparations.[3] It seemed reasonable to assume, therefore, that the concentration of poliomyelitis antibodies would be appreciably greater in fraction II alone, from which commercial gamma globulin is prepared. This assumption has been borne out by an extensive and painstaking series of titrations by S. D. Kramer.[4] These experiments, as yet unpublished, indicate that neutralizing antibodies against the Lansing strain of poliomyelitis virus are present in fraction II at an average concentration eighteen to twenty-five times as high as in the corresponding whole plasma.

The present work basically constituted a repetition of the convalescent serum studies, and from the reports of the three recorded studies of this sort in which establishment of a control series of cases was attempted [5] there seemed little reason to be hopeful. However, with the much larger dosage of antibody theoretically available in a given volume of gamma globulin it was conceivable that a favorable result might be obtained. The question clearly needed to be investigated and the situation for doing so looked very promising. Accordingly a plan to study the therapeutic effect of gamma globulin in poliomyelitis, with a request for allotment of sufficient material, was submitted to the Technical Advisory Committee of the American Red Cross, which at that time controlled the national gamma globulin supply.

This committee approved the study as outlined and agreed to release enough material to carry it to a significant conclusion. Its approval had but two provisos—that, contrary to the plan as submitted, only preparalytic cases be included in the study, and that we be advised throughout by a special committee consisting of Drs. Edwards A. Park, Charles A. Janeway and Ernest L. Stebbins.[6]

The two major foci in the epidemic were in the Elmira and Buffalo areas, and it was decided to confine the study to two hospitals in each of these regions. There are only two hospitals in Elmira, the Arnot-Ogden and St. Joseph's, and essentially all patients of any age with poliomyelitis were being cared for in them by the two licentiate pediatricians in the city. Of the several hospitals in Buffalo, the two chosen were Children's, because it was bearing the brunt of the epidemic for the city as a whole, and Meyer Memorial, because it was receiving a fair number of adult patients. The project was presented to the various staff physicians concerned at each hospital, and all expressed themselves as willing to cooperate to the fullest extent.

As has already been noted, the idea was conceived in July, and all the necessary groundwork had been laid early in August. Because of complexities of production, however, the pharmaceutical company which was assigned the order for the gamma globulin was unable to fill it immediately, so that the material was not received until August 20. Consequently the study was not launched until August 22 in Buffalo and August 23 in Elmira.

All the staff men concerned gave their assurance that it would be feasible to enroll every preparalytic case in the study strictly according to plan regardless of whether they happened to be private or service cases, and in actual practice there was only one exception. In Elmira a nurse who had been working in the poliomyelitis wards and had seen the injections developed the disease and should have been in the treated group, but she refused to have the treatment and so had to be interchanged with a 4 year old girl who came in five hours later. All other cases were enrolled alternately without exception as treated and controls in the order of their admission to each individual hospital. The field team checked on every poliomyelitis admission and reviewed the hospital charts regularly for the clinical condition at the time of admission. These records show that every case which was unquestionably preparalytic poliomyelitis according to the stipulated criteria was included in the study.

The criteria for preparalytic poliomyelitis were established by the special advisory committee and were twofold: (1) the cerebrospinal fluid of the patient was required to contain more than 10 cells per cubic millimeter and (2) there could be no definite weakness of any major muscle group and no evidence of facial, pharyngeal or respiratory involvement in a patient who otherwise presented a clinical syndrome indicative of poliomyelitis. Every one concerned, including the committee, felt that the stipulation of a minimal spinal fluid cell count of 11 was regrettably arbitrary, but it was agreed on as necessary to substantiate the diagnosis and

From the Division of Communicable Diseases, New York State Department of Health.

This study would not have been possible without the cooperation of a host of collaborators, whose names are listed in the reprints.

Gamma globulin is the name used to achieve brevity in describing concentrated normal human serum gamma globulin (immune serum globulin) prepared by the method of Cohn, Oncley, Strong, Hughes and Armstrong[1] from blood collected by the American Red Cross.

1. Cohn, E. J.; Oncley, J. L.; Strong, L. E.; Hughes, W. L., Jr., and Armstrong, S. H., Jr.: The Characterization of the Protein Fractions of Human Plasma, J. Clin. Investigation **23**: 417, 1944.

2. Enders, J. F.: The Concentration of Certain Antibodies in Globulin Fractions Derived from Human Blood Plasma, J. Clin. Investigation **23**: 510, 1944.

3. Williams, J. W.; Petermann, M. L.; Colovos, G. C.; Goodloe, M. B.; Oncley, J. L., and Armstrong, S. H., Jr.: Electrophoretic and Ultracentrifugal Studies of Solutions of Human Serum Albumin and Immune Serum Globulins, J. Clin. Investigation **23**: 433, 1944.

4. Dr. S. D. Kramer is associate director, Bureau of Laboratories, Division of Virology, Michigan State Department of Health.

5. Kramer, S. D.; Aycock, W. L.; Solomon, C. I., and Thenebe, C. L.: Convalescent Serum Therapy in Preparalytic Poliomyelitis, New England J. Med. **206**: 432, 1932. Park, W. H.: The Therapeutic Use of Convalescent Serum in Preparalytic Cases of Poliomyelitis, with a Comparison Between Treated and Untreated Cases, Tr. A. Am. Physicians **47**: 123, 1932. Fischer, A. E.: Human Convalescent Serum in the Treatment of Preparalytic Poliomyelitis: A Comparison of 447 Treated and 102 Control Patients in New York City in 1931, Am. J. Dis. Child. **48**: 481 (Sept.) 1934.

6. Dr. Edwards A. Park, chairman, is professor of pediatrics, Johns Hopkins University School of Medicine, and pediatrician-in-chief, Johns Hopkins Hospital. Dr. Charles A. Janeway is assistant professor of pediatrics, Harvard Medical School, visiting physician, Children's Hospital, Boston, and associate in medicine, Peter Bent Brigham Hospital. Dr. Ernest L. Stebbins is commissioner, New York City Department of Health.

prevent the otherwise inevitable subsequent criticism that probably some cases that were not poliomyelitis had been included. Actually the typical paralytic disease developed later in a number of cases excluded from the study because of cell counts under 11.

Each patient was seen on admission by one of the resident or attending physicians, and if there was no clinical evidence of paralysis the case was referred for a detailed muscle grading. This was done promptly by a specially assigned registered physical therapist on twenty-four hour call, who was required to commit herself immediately on the completion of her examination as to whether she thought there was any definite weakness of a major muscle group. If she found none, and if the total cell count of the cerebrospinal fluid which had been examined meanwhile was over 10, the case was considered suitable for inclusion in the study.

TABLE 1.—*Gamma Globulin Dosage Schedule and Estimated Equivalents in Whole Plasma* *

Buffalo and Elmira 1944

	Gamma Globulin	Whole Plasma
Under 1 year of age	20 cc.	360 - 500 cc.
1 year of age	30 cc.	540 - 750 cc.
2 years of age	40 cc.	720 - 1,000 cc.
3 years of age	50 cc.	900 - 1,250 cc.
4 years of age	60 cc.	1,080 - 1,500 cc.
5-7 years of age	70 cc.	1,260 - 1,750 cc.
8-11 years of age	80 cc.	1,440 - 2,000 cc.
12 years and over	100 cc.	1,800 - 2,500 cc.

* Based on titrations of antibodies against the Lansing stain of poliomyelitis by Dr. S D. Kramer.

Patients due to be treated received gamma globulin intramuscularly in accordance with the dosage schedule presented in table 1. It was felt that it was probably important to give the total dose as soon as possible. For that reason it was stipulated that each patient receive his full quota all at once, and that condition was met in every case. The dosage schedule was prescribed by the special advisory committee and was made as large as they thought could be tolerated by an intramuscular route. An age scale was employed rather than a presumably more accurate one based on body weight because of the practical difficulty of obtaining those weights by hospital staffs already harassed almost beyond endurance. It was suggested that the full dose be divided preferably into not more than four portions injected into the anterior thigh muscles and buttocks. In no case were more than four sites required and actually many of the patients were able to take the dose in two or three portions.

Patients that fell into the control group were followed exactly as the treated ones, but they received no injections. The original plan was to give the controls normal serum or isotonic solution of sodium chloride. The special advisory committee decided against this plan and in favor of no injections because it felt that a better control would be obtained by the latter method and it questioned the importance of the psychologic aspects of control injections. The clinicians in charge of the cases were sure that omission of control injections would not lead to any selection of cases; accordingly uninjected controls were used.

One week after admission, again one week after that, and finally five to seven months from onset the muscle gradings were repeated on all patients, always by the same physical therapist who had made the initial grading. Three physical therapists were employed in all, one at Children's Hospital where the great majority of the data were obtained, another at Meyer Memorial Hospital and the third at the two Elmira hospitals. All three of these technicians are highly skilled, all follow essentially the same method of muscle examination and all used the same form to record their results. This form, which is the one currently used for muscle grading by the Medical Rehabilitation Division of the New York State Health Department, lists fifty-three individual muscles or functionally related groups. All fifty-three were checked each time except in a few patients who were too sensitive to grade on the second or third gradings. The condition of each muscle or group was evaluated as normal, good, fair, poor, trace of power or totally paralyzed.

It would have been ideal if the physical therapists could have been kept in complete ignorance as to which patients were treated and which were controls, but this possibility was lost when it was decided not to use a control injection. An earnest effort was made at the very outset, however, to inculcate them deeply with the idea that the value of the agent under investigaiton was entirely unknown, that there was no more reason to anticipate a favorable effect than a negative one, and that it was positively essential, if the efforts of every one were not to be wasted, that unbiased data be obtained. They were cautioned, moreover, not to attempt to refresh their memories if they should forget from one examination to the next which patients were treated. They kept the grading forms with them until the study was completed, so that it was not necessary for them to refer to the hospital charts to make their entries, and they had no access to our special case cards with a detailed record of treatment. As a result of all this—and this is particularly true in the case of the one technician who had 89 of the patients—the physical therapists were not aware for the most part which patients received treatment and which did not.

TABLE 2.—*Criteria of Comparability*

Buffalo 1944

Criterion	Number of Patients	
	Treated	Controls
Total	49	48
Month of onset:		
August	25	24
September	20	21
October	4	3
Male	34	30
Under 5 years of age	4	7
5-9 years of age	18	18
10-14 years of age	18	16
15 years and over	9	7
Interval from onset to hospital admission:		
1 day or less	13	12
2-4 days	17	17
5-7 days	13	13
8 days and over	6	6
Cerebrospinal fluid total cell count:		
10- 49	19	17
50- 99	11	10
100-199	13	14
200 and over	6	7
Received hot packs	47	43

The study was begun, as already stated, on August 22 in Buffalo and on the 23d in Elmira. It was not continued for a comparable interval in all four hospitals, however. By September 13 the admission rate had fallen so low at Meyer Memorial Hospital that the returns were not sufficient to justify the expenditures involved, so that no patients were enrolled in the study in that hospital after that date. By September 25 the same situation had developed in Elmira, and further

expansion of the study was discontinued. At Children's Hospital the admission rate stayed up appreciably longer, and termination was not indicated until October 19.

During these respective periods a total of 112 patients were enrolled, 90 at the Children's Hospital, 8 at Meyer Memorial and 14 in Elmira. In this total there was apparently only one mistaken diagnosis, in a control child at Children's Hospital who was subsequently found to have tuberculous meningitis and who has been excluded from the data.

On the basis of our knowledge of the actual working conditions of the experiment in the two Buffalo hospitals we feel justified in considering the patients from both as a single group, and the results have been so tabulated. Because of the violation of strict alternation of cases in the Elmira group, and also because the physical therapist there seemed to interpret the gradings or functionally related groups. For the calculation of the index, some additional combinations were made based on two factors: (1) spinal nerve innervation of muscle groups and (2) advice from the physical therapists as to the fineness with which they could distinguish between the functioning of various muscle groups. Thus all the flexors of the hand were combined in one group, all the small muscles of the hand in another, and so on to a total of thirty-five separate items. The various degrees of muscular involvement as noted by the physical therapists were given progressive numerical values, with normal = 0, good = 1, fair = 2, poor = 3, trace of power = 4 and total paralysis = 5. Where muscles were grouped, the total value for the group was divided by the number of muscles making up the group and the figure obtained was added with all the other separate values to produce a single numerical value for the body

TABLE 3.—*Results of Muscle Gradings*

(Second, about one week after admission; third, one week later; fourth, five to seven months from onset)
Buffalo 1944

Index of Paralysis	Number of Patients						Per Cent					
	Second Grading		Third Grading		Fourth Grading		Second Grading		Third Grading		Fourth Grading	
	Treated	Controls	Treated	Controls	Treated	Controls	Treated	Controls	Treated	Controls	Treated	Controls
0	30	27	25	26	34	34	62.5	61.4	53.2	55.3	73.9	73.9
1 - 9	11	14	14	14	7	6	22.9	31.8	29.8	29.8	15.2	13.0
10 - 59	5	2	7	5	5	5	10.4	4.5	14.9	10.6	10.9	10.9
60 - 119	1	1	..	2	..	1	4.2	2.3	2.1	4.3	....	2.2
120 - 169	1	..	1	..	..	..						
Grading not obtainable	1	4*	2	1*	3	2*						
Total	49	48	49	48	49	48	100.0	100.0	100.0	100.0	100.0	100.0

* Including 1 fatal case.

TABLE 4.—*Relation of Interval from Onset to Treatment* and Grading Results*

Buffalo 1944

Index of Paralysis (4th Grading)	Number of Patients				Per Cent			
	Treated		Controls		Treated		Controls	
	Less Than 4 Days from Onset	4 Days and Over from Onset	Less Than 4 Days from Onset	4 Days and Over from Onset	Less Than 4 Days from Onset	4 Days and Over from Onset	Less Than 4 Days from Onset	4 Days and Over from Onset
0	20	14	19	15	74.1	73.7	76.0	71.4
1 - 9	4	3	3	3	14.8	15.8	12.0	14.3
10 - 59	3	2	2	3	11.1	10.5	8.0	14.3
60 - 119	..	..	1	..	....	....	4.0	....
Not obtainable	1	2	..	2†				
Total	28	21	25	23	100.0	100.0	100.0	100.0

* Regarded as interval from onset to hospitalization in control cases. † Including 1 fatal case.

during the acute stage of the disease somewhat more rigidly than the other two workers, it was thought best to consider those 14 cases separately, and they will be presented briefly after the Buffalo data.

Table 2 was compiled to test the comparability of the treated and control groups of cases with regard to certain fundamental factors: month of onset, sex, age, interval from onset to hospitalization, spinal fluid cell count and hot pack therapy. Inspection of the figures discloses the fact that the two groups, with the aforementioned case of tuberculous meningitis omitted from the controls, are strikingly similar with respect to every criterion listed. It seems justifiable to conclude on this basis that the study was adequately controlled, and there is no reason to assume that the comparison of treated cases and controls is any less valid where the data on muscle gradings are concerned.

The results of the muscle gradings were expressed in terms of a numerical index. It will be recalled that the grading form itemized fifty-three separate muscles as a whole. According to this scheme the maximum index possible with each muscular item showing complete paralysis would be 350.

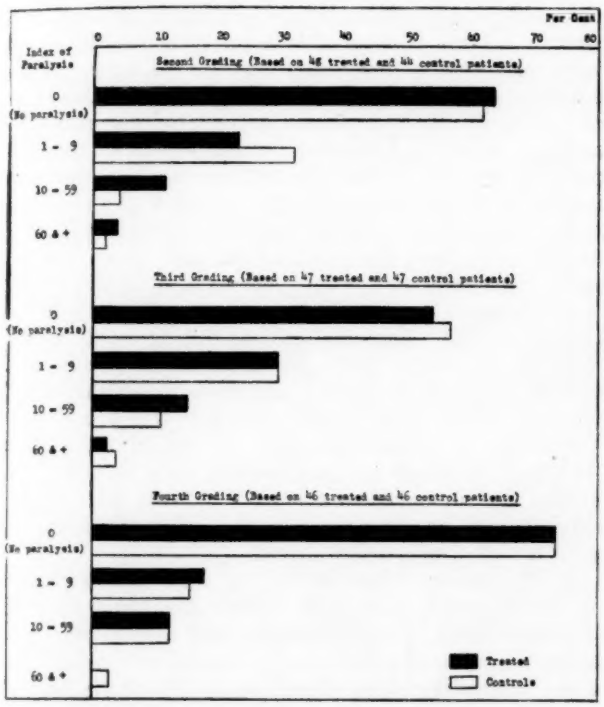
This method of course does not indicate the actual disability of the patient in functional terms, but it does express the disability in somatic terms; that is, in terms of the number of segments of spinal cord involved and the degree of that involvement. This claim seems sound, as muscles were grouped only when they were supplied by the same segments of cord. And for the purposes of this study it is the somatic involvement which is significant, since any significant effect of the agent under investigation would be expressed as the ultimate effect of the virus on the central nervous system.

Table 3 shows the grading results expressed as the numerical index of paralysis, with the treated and control groups broken down according to this index on the second, third and fourth examinations. The results on the first examination are omitted, since all cases had a zero grading at that time by virtue of the basic con-

ditions of the study. Viewed even in terms of individual cases the results are clearcut, but to simplify presentation the indexes were grouped as noted in the table. It is readily apparent from the table that treated and control cases are of essentially equal distribution in each paralysis-index group.

The patient with the highest index in the study (169 on the second examination and 163 on the third) happened to be in the treated group. This child was inaccessible for the six months follow-up because he had moved out of the state, but it was learned at that time through relatives that he still had definite involvement of all four extremities.

Of the other cases classified as "grading not obtainable," all except the fatal case had to be omitted on the second examination because of hyperesthesia of extreme degree. The muscles of 1 of these patients were still too sensitive for grading at the time of the third examination. The other patient missed on the third examination was an air force cadet who was considered well enough for discharge to the infirmary at his base before the grading was due, and the military authorities declined permission for the physical therapist to follow him at the base. On the second grading he had only minimal involvement of the left shoulder with an index of paralysis of 3, and at the time of his discharge from the hospital he was regarded clinically as having no residuum.



Results of muscle gradings, Buffalo 1944.

With the obvious exception of the fatal case, all those missed on the fourth grading had moved to some point too far from Buffalo to be reached by the physical therapist.

Certain clinical details regarding the 1 patient who died warrant special mention. This child appeared critically ill to the resident at Children's Hospital when she first saw him in the admitting room, and she had a presentiment that he might be a bulbar case. Since she and two other house officers were unable to detect any signs of facial, pharyngeal or respiratory involvement, however, he was admitted to the study in the proper order as a control case. Within one and one-half hours of his transfer to the ward he developed definite respiratory embarrassment. The next day there was a rapid progression of symptoms, and the day after that, forty-eight hours after admission, he died.

TABLE 5.—*Criteria of Comparability*

Elmira 1944

Criterion	Number of Patients	
	Treated	Controls
Total	7	7
Month of onset:		
August	4	3
September	3	4
Male	2	5
Under 5 years of age	2	2
5-9 years of age	..	1
10-14 years of age	3	3
15 years and over	2	1
Interval from onset to hospital admission:		
1 day or less	4	4
2-4 days	2	2
5-7 days	1	1
8 days and over	..	..
Cerebrospinal fluid total cell count:		
10 - 49	1	2
50 - 99	1	4
100 - 199	2	1
200 and over	3	..
Had hot packs	7	6

The negative quality of the results in table 3 is emphasized by the percentage distribution also presented there, and it is rendered even more striking by the chart, in which these percentage values are shown in graphic form.

Despite this negative outcome for the group as a whole, consideration was given to the possibility that the therapeutic agent might be of some benefit in early cases. To test this possibility table 4 was prepared, with the patients divided according to whether they were treated within four days of onset or later. Here again the equality of numbers in treated and control groups is striking at each index level, and it is obvious that patients who were treated early in the course of their disease were no better off than those treated late.

With 97 cases from Buffalo as a background, the Elmira cases merit some consideration even though they numbered only 14. The comparability data on them are presented in table 5. It will be noted that even with such small numbers the treated and control groups are apparently quite comparable with respect to the factors considered, with the possible exception of somewhat higher spinal fluid cell counts in the treated group.

TABLE 6.—*Results on Fourth Muscle Grading*

Elmira 1944

Index of Paralysis	Treated	Controls
0	1	4
1 - 9	2	2
10 - 29	3	0
Unknown	1*	1†
Total	7	7

* Not available for fourth grading but essentially normal at third grading.

† Not available for fourth grading but information by correspondence claimed complete recovery.

Table 6 shows the results in 12 of the 14 cases on the fourth muscle gradings. The second and third gradings were not tabulated because of the physical therapist's tendency to make numerous qualifying notations

on her records. This made it difficult to evaluate her findings and reduce them to a numerical index. For the fourth grading, however, when the muscles were no longer hypersensitive, the records are concise and could be coded in accordance with our scheme. From this coding, as presented in the table, it is clear that the 7 treated patients were not benefited by the treatment.

In summary it can be conclusively stated that, in a series of 111 patients with preparalytic poliomyelitis observed for approximately six months after onset, no benefit is detectable when 56 of them who had received large doses of gamma globulin intramuscularly in the preparalytic stage are compared with 55 alternate, untreated controls.

As a corollary to the foregoing conclusion, these data compiled with gamma globulin offer further indication that serum in any form is, for all practical purposes, ineffective in the therapy of poliomyelitis. This is evident from the comparison of dosages in terms of poliomyelitis antibodies in gamma globulin and whole plasma presented in table 1. These values are for normal adult plasma collected without reference to an antecedent history of poliomyelitis, but there is no definite evidence that the concentration of neutralizing antibodies against poliomyelitis virus is any higher in convalescent serum than it is in normal pooled adult plasma.[7]

A STUDY OF THE ORIGIN OF AN EPIDEMIC OF POLIOMYELITIS

MARTHA L. SMITH, M.D.
EDWARD M. BRIDGE, M.D.
HELEN E. UNDERWOOD
AND
GRACE E. DALE
BUFFALO

Few reports have been published concerning the sources of the initial cases of poliomyelitis in a large and widespread epidemic, although many investigators have demonstrated the radial spread of the disease from established epidemic areas. Wickman [1] focused attention on a parish school as the possible common source of some of the early cases in the Swedish epidemic of 1905, but he offered no suggestion as to how the infection entered the school prior to the first clinical case. In 1911 Kling and Levaditi [2] reported that an immune carrier was probably responsible for the introduction of the disease into two small islands off the coast of Sweden. However, in view of present day knowledge, this circumstance is probably not significant since at that time the incubation period of poliomyelitis was erroneously thought to be from two to three days.[3] The 1916 epidemic in New York City and environs presented additional evidence to support the thesis that the disease spreads by person to person contact, but again there was no clue as to the source of the early cases. In several communities, however, an important observation was made, namely that in a previously uninfected area the first recognized case may have had no contact with a clinical case of poliomyelitis from the epidemic areas. Furthermore, in several instances the epidemic was ushered into a new community by several simultaneous, widely separated cases having no possible direct contact with one another.[4] The obvious conclusion was that during an epidemic period the reservoir for the spread of the virus was not confined to the paralytic cases. Today this a well accepted fact.

In recent years increasing emphasis has been placed on the importance of abortive forms and healthy carriers of the virus in the spread of the disease from person to person and community to community.[5] Although since the studies of Wickman the existence of such foci of spread has been repeatedly discussed, no observations have been made concerning the role played by such circumstances in the outbreak of a fresh epidemic. In spite of a large body of data supporting the thesis that very mild or abortive forms may be the source of the paralytic cases of the disease, discussions of the origin of epidemics have emphasized the environmental and sanitary factors. Lumsden,[6] in his report of the 1941 outbreak in Mississippi, stressed specific environmental factors as a background for the outbreak of the disease rather than person to person contact. Similarly, Casey [7] hypothesized that the first patient and many sporadic cases in the Walker County, Alabama, epidemic of 1941 were exposed to stagnant waters, polluted from an epidemic area. Ward and Sabin,[8] during a cold winter, isolated the virus from the intestinal contents of 2 patients with poliomyelitis and from a healthy sibling of each. One of the healthy carriers was found to be harboring the virus as long as six months later. Although drawing no conclusions, they inferred that during the interepidemic period patients and healthy carriers may be the reservoirs for virus which may in some way become disseminated.

At the present time the known facts are insufficient to permit conclusions to be drawn regarding the relative importance of environmental and human reservoirs in the initiation of a fresh early summer epidemic. This study was undertaken, therefore, to determine the role which human reservoirs, in the guise of healthy carriers or unrecognized illnesses caused by the virus, may have played in the origin of the first paralytic cases of poliomyelitis in the 1944 epidemic in the Buffalo area. Thus, two pertinent questions presented themselves:

1. Why did 3 almost simultaneous cases suddenly appear in a rural township in which no previous cases had been known for fifteen years?[9]

---

7. Rivers, T. M.: Immunological and Serological Phenomena in Poliomyelitis, Lecture 3, p. 59, Infantile Paralysis, National Foundation for Infantile Paralysis, Inc., 1941.

The study was aided by a grant from Kart's Dairy, Inc., of Buffalo.

From the Department of Pediatrics of the University of Buffalo School of Medicine and the Statler Research Laboratories of the Children's Hospital of Buffalo.

1. Wickman, O. I.: Acute Poliomyelitis: Nervous and Mental Disease Monograph, series 16, New York, 1913.

2. Kling, C., and Levaditi, C.: Etudes sur la poliomyélite aigue épidémique, Pub. de l'Institut Pasteur de Paris, Arch. Pediat. **34:** 405, 1917.

3. Aycock, W. L., and Kessel, J. F.: The Infectious Period of Poliomyelitis and Virus Detection, Am. J. M. Sc. **205:** 454, 1943. Casey, A. E.: The Incubation Period in Epidemic Poliomyelitis, J. A. M. A. **120:** 805-807 (Nov. 14) 1942.

4. Nicoll, M., Jr.: Epidemiologic Data in the Poliomyelitis Epidemic in New York State, Am. J. Dis. Child. **14:** 69 (Aug.) 1917. Kerley, C. G.: Communicability of Poliomyelitis, Arch. Pediat. **34:** 32 (Jan.) 1917. Graster, C. V.: Some Features in City Prevalence of Poliomyelitis, J. A. M. A. **68:** 1535 (May 26) 1917.

5. Paul, J. R.; Salinger, R., and Trask, J. D.: "Abortive" Poliomyelitis, J. A. M. A. **98:** 2262 (June 25) 1932. Wenner, H. A., and Casey, A. E.: A Community Study of Carriers in Epidemic Poliomyelitis, J. Clin. Investigation **22:** 117-125 (Jan.) 1943. McClure, G. Y., and Langmuir, A. D.: Search for Carriers in Outbreak of Acute Anterior Poliomyelitis in Rural Community: Incidence of Virus in Feces, Am. J. Hyg. **35:** 285-291 (March) 1942. Langmuir, A. D.: Carriers and Abortive Cases in a Rural Poliomyelitis Outbreak, Am. J. Pub. Health **32:** 275-281 (March) 1942.

6. Lumsden, L. L.: An Epidemiological Study of Poliomyelitis in Mississippi in 1941, Pub. Health Rep. **57:** 729-753 (May 15) 1942.

7. Casey, A. E.: Place of Contact and Radial Spread of Epidemic Poliomyelitis, Am. J. Dis. Child. **69:** 152-156 (March) 1945.

8. Ward, R., and Sabin, A. B.: The Presence of Poliomyelitis Virus in Human Cases and Carriers During the Winter, Yale J. Biol. & Med. **16:** 451-459 (May) 1944.

9. The last case of poliomyelitis reported to the New York State Department of Health from the town of Eden was that of a 17 year old youth taken sick Aug. 16 1929.

2. Should the onset of an epidemic be dated from the first cases of paralysis or is its presence obscured by the absence of paralysis or other characteristic manifestations?

DESCRIPTION OF THE BUFFALO EPIDEMIC

During the summer of 1944, Buffalo and its surrounding county (Erie) were the center of the largest outbreak of poliomyelitis in their history, 1,083 cases of the disease, of which approximately 625 were paralytic, being reported. This represented an overall incidence of 1.35 cases per thousand of population.

The first 3 paralytic cases of the epidemic proper developed within the period of May 23-28 in a small rural community about 20 miles south of the city of Buffalo. During the succeeding weeks other cases appeared in the city proper, in the suburbs on the northern side of the city and finally in more distant communities, giving the entire epidemic the characteristics of a disease spread by radial contiguity.

During the preceding year poliomyelitis had existed in the city of Buffalo and its surrounding county, 81 cases having been reported. However, this represented no unusual proportion for the endemic incidence in a community of this size, i. e. approximately 800,000 people.[10]

Eleven of these cases occurred during the period from Oct. 1, 1943 to Jan. 3, 1944 and, as shown in figure 1, were scattered over an area within approximately 40 miles of the city of Buffalo. The last 2 cases occurred on an Indian reservation about 25 miles south of the site of the next case, which was the first reported in the 1944 epidemic. However, an interval of five and one-half months elapsed between these illnesses. The proximity of these late fall and early winter cases to the site of the first recognized case of the following summer leads one to suspect that the virus might have been continuously active not far from the community in which the earliest cases of the 1944 epidemic occurred. Furthermore, with the increased travel of war workers back and forth between the city and rural areas the possibility of a person to person spread of the virus certainly existed, with illnesses smoldering over a period of time and finally culminating in a widespread epidemic.

METHODS OF STUDY

Although at the beginning of the 1944 epidemic no one was prepared to conduct an epidemiologic study and many of the facts had to be ascertained at a later date, certain sources of information in the community greatly facilitated the work. Since the first cases developed three weeks before the central school of the township recessed for the summer, the records of school absences furnished an accurate log of a large proportion of the significant illnesses occurring among the child population before actual cases of poliomyelitis were recognized. Fortunately too the school nurse had made immediate inquiry into the reasons for all absences and in many instances had verified these by visits to the home. The nature of the illness or reason for the absence was therefore available from this log in simple terms, such as, cold, "grip," stomach upset, sore throat. A worker from the research staff, with the knowledge of the dates and general natures of the illnesses, interviewed approximately 200 of these patients, frequently bringing to light additional facts and concluding with clear pictures of the characters of the illnesses. This knowledge proved of great value in studying the early phases of the epidemic.

In order to obtain similar information during the summer recess while the epidemic was at its height, a questionnaire was distributed to each school child as soon as the fall term began. On these the parents recorded the dates and symptoms of any illnesses which had occurred during the period. In this survey, which came at a time when the community was still alarmed by the epidemic and anxious to cooperate in any forward step, additional data were obtained concerning the minor illnesses in the mid and latter phases of the outbreak. Ultimately the entire material relating to community illnesses was transferred to punch cards and sorted by type of illness and week of occurrence.

In addition to these sources of information relative to the minor illnesses in the community, a detailed study was made of the contacts of all paralytic cases in an attempt to trace down the source of each. Special attention was given to the first 3 cases, all of which

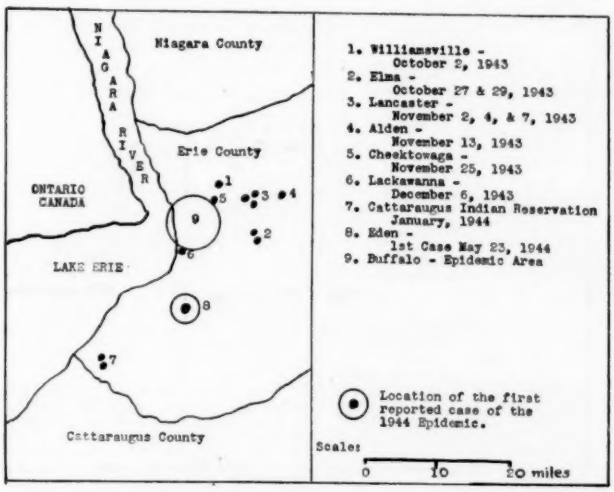

NIAGARA RIVER
Niagara County
Erie County
ONTARIO CANADA
LAKE ERIE
Cattaraugus County
1. Williamsville - October 2, 1943
2. Elma - October 27 & 29, 1943
3. Lancaster - November 2, 4, & 7, 1943
4. Alden - November 13, 1943
5. Cheektowaga - November 25, 1943
6. Lackawanna - December 6, 1943
7. Cattaraugus Indian Reservation January, 1944
8. Eden - 1st Case May 23, 1944
9. Buffalo - Epidemic Area
Location of the first reported case of the 1944 Epidemic.
Scale:
0 10 20 miles

Fig. 1.—Location of cases of poliomyelitis in the greater Buffalo area during the period of eight months preceding the first reported case in 1944. Each dot indicates a case of poliomyelitis.

developed within a period of five days. After ascertaining the activities and habits of the children who acquired the disease, any suggestive illnesses among the contacts could be verified from the records that have been discussed. Activities in four categories were considered: (1) home and neighborhood, (2) school grade, (3) school bus and (4) church. By correlating information from all sources, a satisfactory overall picture was obtained of the health conditions in the community from which the entire epidemic in the area seemed to radiate.

STUDY OF THE FIRST THREE PARALYTIC CASES

At the beginning of the investigation the problem of ascertaining, if possible, a source for the first cases presented itself. This was particularly intriguing since the 3 earliest cases developed within a period of five days and the disease could not, therefore, have been acquired from one another. The study brought to light interesting facts relative to the origin of the earliest cases of paralysis, and these facts pertained to the origin of the entire epidemic as well.

PATIENT I.—A preschool child aged 4 was reported to the department of health with onset on May 23,

10. The Bureau of Census of the United States Department of Commerce, dated Feb. 15, 1944, estimated the population of Erie County, N. Y., as 798,377. The city of Buffalo comprises about 75 per cent of the population of Erie County.

1944. His family is designated A in the following discussion. His father, a repairer of farm machinery in the community, owned a small farm 3 miles from the nearest village. Two older sisters aged 12 and 7 and a twin brother aged 7 went by school bus to the central school. A baby sister and the mother were at home.

Several hundred yards away lived their only intimate neighbors, family B, composed of a mother with 2 children, 1 preschool aged 4 and the other aged 6. The latter used the same school bus as family A. These two families visited each other daily, and once a week the mothers went marketing together accompanied by the 3 preschool children. Aside from these weekly trips to the village, patient I had no contacts except with the 9 members of these two families.

Other members of these family groups had more widespread associations. The 4 school children traveled each day on bus 1, which, owing to wartime restrictions, was decidedly overcrowded. They attended kindergarten, first, second and fifth grades at a central school which had an enrolment averaging about 750. On the playground and in special shop and gymnasium classes they associated with children from other grades. In

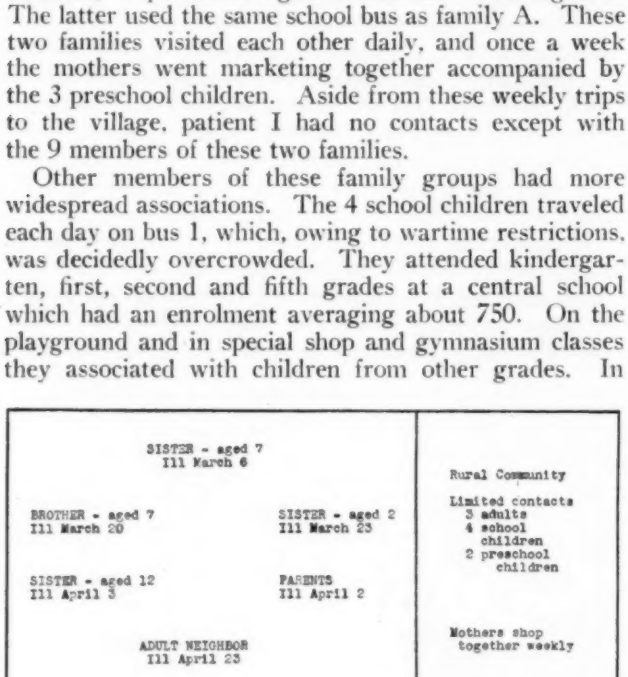


Fig. 2.—List of illnesses among 8 of the 9 close contacts of case 1. Note that the interval between illnesses is approximately two weeks.

a third family, family C, living half a mile away, were 5 children all but 1 of whom rode on bus 1. The 2 girls in family C came occasionally to the A house to play with the 12 and 7 year old children. No other contact with family C is admitted. Two other families lived across the road from family A but neither had children nor any contact with family A, B or C. It is entirely probable, therefore, that if patient I acquired his poliomyelitis from a human reservoir the source must have been 1 of the 9 members of families A and B. The known facts contain no information relative to environmental factors as a source for the disease in family A except that analysis of water from a well located not far from the barn showed it to be "unsafe" for drinking. Their toilet was in the cellar and emptied into a cesspool in a field at least 150 feet from the house and well.

Among the 9 contacts of patient I, 8 were known to have had an illness of some kind during the three months preceding the recognition of poliomyelitis in the group. Figure 2 presents these illnesses in simplified form. Six of the patients had rather widespread outside contacts and might have been concerned not only with the origin of the first paralytic case but also with the spread of the epidemic. The following is a description of these illnesses:

1. Sister, aged 7, was sick March 6-9 with fever, "cold" and headache, which was so severe that she cried out frequently from the pain. A search among her friends and acquaintances and a check on the school absence lists failed to reveal a likely source of this illness.

2. Twin brother of the preceding child was sick March 20-23. The symptoms were fever, sore throat and a "cold," which were so severe that for a time pneumonia was considered. It appeared probable that he had acquired the infection from his twin sister and that the incubation period was approximately two weeks.

3. Baby sister, aged 2, was ill March 23-25 with symptoms of "a very bad cold." Since she was too young to have had significant contacts outside the family, it seemed likely that she too acquired the infection from the older sister (1). Contacts between these two were less intimate than between the twins (1 and 2), and if contact was assumed to have taken place toward the end of the illness of 1 the incubation period would again be approximately two weeks.

4. Sister, aged 12, was ill April 3-5 with a sore throat. Since she was in daily association on the school bus and at home with 1 and 2 and had little time for play with her baby sister (3), the brother (2) seems to be the more likely source. Again the incubation period appears to be about two weeks.

5 and 6. The mother and father both had symptoms of a "bad cold," felt miserable and had mild diarrhea, the illness lasting three or four days. This occurred about the first week in April, but there was no way of verifying the exact date. The probable source was the youngest child, and therefore the incubation period was approximately two weeks.

7. Mrs. B, intimate neighbor, was ill April 23-27. She complained of a "heavy cold" with fever, dizziness, severe headache, severe pains in the legs and moderate diarrhea. This occurred approximately two weeks after the illness of Mrs. A.

8. Son of Mrs. B., aged 6, was ill May 8-16 with "cold," fever and some diarrhea. Although attending kindergarten and riding on the same bus as the children from the A family, he had not yet acquired intimate friends in school. He had been, however, in close contact with his ill mother (7) two weeks before and according to school records had been kept home on April 25 to take care of his mother.

9. Patient I, the 4 year old member of the A family, developed poliomyelitis with prodromal symptoms beginning on May 23, 1944 and sudden leg paralysis on May 25. On May 12 the 6 year old neighbor (8) had felt better and had gone with his mother and sister to a birthday party at the A home. No other outsiders attended. This first case of paralytic poliomyelitis had its onset of prodromal and paralytic symptoms eleven and thirteen days respectively after this gathering. All during the period of preceding illnesses in the families A and B, child 9 had not developed any symptoms in spite of his close association with each illness. At the time his parents considered this extraordinary. His poliomyelitis climaxed the series of illnesses, and thereafter no one was ill in either family, although the epidemic of infantile paralysis and "grip" raged throughout the community for the succeeding three months.

10. No symptoms are known to have occurred in the 4 year old preschool member of the B family who was a constant playmate of child 9. One can only conclude that this child either had symptoms so mild as to have passed unnoticed or acquired immunity without symptoms of any kind.

Family C, whose contacts with family A were limited to infrequent visits between 2 children from each home, had no illnesses or absences before the first case of definite poliomyelitis. However, simultaneously with this illness 2 girls of the C family were sick for a week with symptoms suggestive of poliomyelitis—fever, headache, vomiting, dizziness and pains in the muscles of the neck, back and legs. Two other members of the family were ill several weeks later.

In summary, patient I developed paralytic poliomyelitis at the end of an eleven week period during which 8 of his 9 associates had illnesses with incubation periods of approximately two weeks. At least one of these

illnesses (7) was highly suggestive of so-called abortive poliomyelitis. The symptoms of the others could not be distinguished from common winter respiratory infections. Circumstantial evidence would suggest that these illnesses represented mild forms of poliomyelitis and were followed by definite paralytic symptoms in the 4 year old child. The incubation period of approximately two weeks is distinctly different from that of common respiratory diseases with which abortive poliomyelitis is most likely to be confused. Judging from this study one would postulate that the poliomyelitis virus had been active in the community for at least eleven weeks prior to the first paralytic case of the disease.

PATIENT II.—A boy aged 9 years lived in a rural but less isolated section of the township than patient I. His family consisted of the father, a worker in a nearby airplane factory, mother and sister aged 5. Within an easy walking distance of their farm were homes of a few children who rode on the same overcrowded school bus, No. 2. At the central school of the township he attended the third grade and in addition had contacts with other children on the playground and at lunch. Contacts of patients I and III attended the same school but traveled on different busses. At home he usually played by himself, but occasionally at a nearby creek he came in contact with several children who associated with patient III. This child had no church affiliations, and therefore his contacts were limited to the school bus, the school and a few children at home. In general, however, his companions and contacts were more numerous than in the preceding case.

Although the setting in this case is too complicated to determine a single source for his poliomyelitis, the general picture of known illnesses among the neighborhood, on the school bus and in the class room is not inconsistent with that described in case 1. His poliomyelitis also developed in a setting of minor illnesses which were similar to those known to be caused by the virus of the disease. The following facts appear significant:

1. Patient II complained of the earliest prodromal and meningeal symptoms on May 24 and paralysis on May 31.

2. An illness, simultaneous in onset with that of patient II, May 26-June 3, occurred in a school contact, BB, aged 10, who boarded the school bus just before patient II. BB was ill for one day with fever, headache and vomiting. During the following three days he felt better but not as well as usual. A second phase with fever, vomiting, pains in the legs and difficulty in walking then set in, but gradual recovery took place without residual weakness.

3. A neighborhood playmate and bus companion of patient II had a sore throat and was absent from school on May 18. A classmate of patient II, who lived a short distance away and rode a different bus, was also ill on May 18 with a "stomach upset" and moderately severe headache. The latter child was a neighbor of patient III.

4. Case II was linked directly or indirectly with four suspicious illnesses occurring prior to clinical poliomyelitis in the community. Three of the children were classmates and the fourth rode on the same school bus.

In summary, although no single specific human source could be ascertained to account for the poliomyelitis of patient II, he is known to have had contact with suggestive minor illnesses, indirect contact with the 2 earliest children with the disease, and to have been circulating in a community where minor illnesses, often corresponding to the symptoms described in abortive poliomyelitis, were prevalent.

PATIENT III.—A girl aged 14 lived on a farm about a half mile from patient II and 4 miles from patient I. Besides the father and mother there were 2 younger children aged 2 and 11 years. She attended the ninth grade of the central school, using bus 3, which carried a few children from the neighborhood of patient II. Two neighbor families with a total of 6 children had continuous contact and rode on the same school bus. Within a half mile were several other families with which contact was casual and infrequent except for the school bus and Sunday school. The following facts are significant regarding illnesses among the contacts:

1. Patient III complained of her first symptoms on May 28 and paralysis on June 2, 1944. In view of the stoical characteristics of the child, prodromal symptoms may have preceded May 28.

2. Simultaneous illnesses beginning on May 26 occurred in her 2 siblings aged 2 and 11 years. The older child complained of fever, general malaise and dizzinesss coming in two distinct waves. The younger child had only a one day febrile illness. The concurrent appearances of these three illnesses suggests a common source in the immediate neighborhood.

3. The 3 children of a near neighbor, who were constant playmates of patient III and her siblings, were all ill between May 14 and May 17. Two had a three day fever with sore throat, stomach upset and pains in the legs. The third had similar symptoms but without painful extremities. One of the children was a classmate of a sibling of patient I, who was ill,

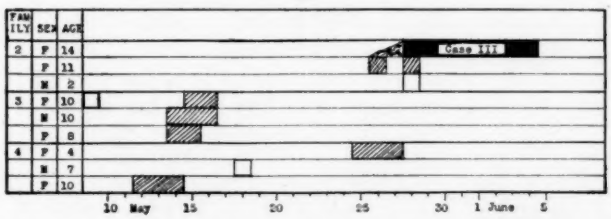


Fig. 3.—Illnesses among the close contacts of case 3. The solid block represents paralytic poliomyelitis; shaded blocks represent an illness which is highly suggestive of being "abortive" poliomyelitis; white blocks represent an illness which has no characteristics to distinguish it from common gastrointestinal or respiratory infections. The shaded triangle indicates uncertain or indefinite prodromal symptoms.

as already mentioned, with sore throat on April 3 to 5, patient I (4).

4. The second near neighbor had three children aged 10, 7 and 4, all of whom were ill between May 12 and May 28 with fever, upset stomach and headache lasting two to three days. Their contact with the family of patient III was less intimate than the previously mentioned children. The illnesses in this family, therefore, may possibly have been acquired from other friends or schoolmates.

In summary, because of the simultaneous illnesses in the siblings of patient III, 1 of whom was a preschool child, a common neighborhood source seemed likely. The 3 most intimate playmates of patient III and her siblings had minor illnesses approximately two weeks before, two of which were suggestive of abortive poliomyelitis. The illnesses are presented in figure 3. In conclusion, patient III developed paralytic poliomyelitis within five days of the onset in cases I and II. There had been no direct contact with patient I and only indirect contact with patient II. Furthermore, the short periods between onsets, one and five days respectively, would indicate either a common source for all or multiple separate sources. While the situation in both cases II and III is more complicated than in case I, the preponderance of evidence suggests multiple and not common sources for all 3.

CASES IN THE COMMUNITY SUGGESTIVE OF POLIOMYELITIS

In the course of studying 20 reported cases of poliomyelitis and the many minor illnesses among school children, numerous persons of various ages were found whose symptoms were so suggestive or whose illnesses were so closely linked with cases of poliomyelitis that they deserved special consideration. An analysis of these cases was undertaken to study what part, if any, they may have had in the origin of the epidemic.

The nature of the illnesses which were considered as being suggestive of poliomyelitis varied greatly. Some of them were mild and lasted only twenty-four hours; others were severe with symptoms continuing for eight to ten days followed by a prolonged period of convalescence. In the mildest instances a running nose, a brief fever or a bout of vomiting might attract little attention in the family, yet from the circumstances surrounding the patient and the illness there seemed little doubt concerning the etiologic nature. In other persons high fever, persistent headache, stiffness of the neck and back and aches and pains in the legs gave the usual picture of so-called abortive poliomyelitis. All gradations of symptoms and severity were encountered.

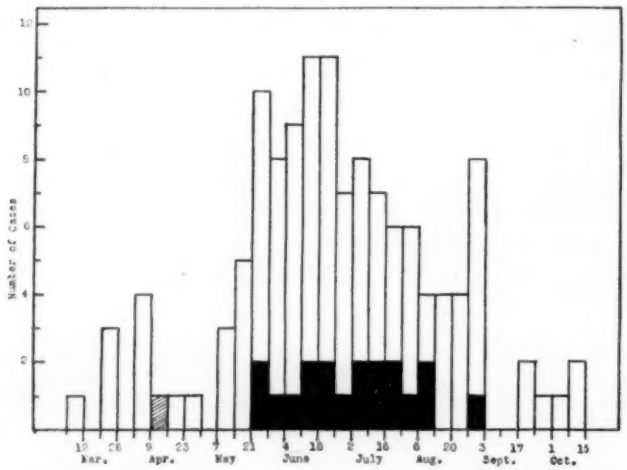


Fig. 4.—Time relationship of 108 cases of abortive poliomyelitis to the 19 cases reported to the department of health. The one case in the shaded block was not recognized as paralytic poliomyelitis until approximately a year after the acute illness.

Before the attention of a community has been called to the possibility of abortive poliomyelitis by the development of a paralytic case, such illnesses usually escape detection. Twenty suggestive illnesses of this nature occurred in the community under discussion before the first recognized case. Nearly a year later 1 of these was found to have a decided degree of residual weakness of one leg and rightly belongs with the diagnosed cases. It is interesting to note that among the 20 persons with suggestive illnesses occurring prior to the recognition of the first paralytic case, 15 were school children, 1 was a preschool child and 4 were adults. In all, nine families were represented. Nine individuals could be linked either directly or indirectly to case I, 4 to case II and 5 to case III.

The dates of onset of the 108 illnesses considered to be highly suggestive of poliomyelitis are presented in figure 4. It will be noted that, while the paralytic cases in the community extended only over a fourteen week period, the suggestive illnesses continued throughout thirty-one weeks. The concentration of cases in the two classes occurred at the same time, but the undiagnosed illnesses began earlier and continued later in the season. The earliest suggestive case occurred on March 6, or eleven weeks before the first case of paralysis.

It would appear, therefore, that illnesses which were highly suggestive of poliomyelitis were occurring in the community approximately three months before the first cases of paralysis were recognized. This is in agreement with the studies reported in the preceding section, which indicated that multiple sources already existed at the time the first 3 cases of paralysis developed. The proportion of 5 highly suggestive cases for each paralytic one is probably a conservative figure.

MINOR ILLNESSES IN THE COMMUNITY

Preceding and during the period when cases of paralytic poliomyelitis were appearing in this community, there were many minor illnesses lasting one to three days and passing for colds or "grip." Some of these were predominantly respiratory in character, others gastrointestinal. Whether these illnesses differed in any way from those more or less prevalent at that time in other years could not be determined from the descriptions given by the persons affected or from the reports of the practicing physicians in the locality. Many of these were investigated by home visits, but even when the details of symptoms could be accurately recalled there was nothing concrete to serve as a basis for distinguishing those caused by common pathogens from others which, on good circumstantial evidence, must have been caused by the virus of poliomyelitis. Illnesses might occur among siblings or intimate contacts of known cases of the disease, yet the cold, running nose, sore throat, fever or vomiting described would differ in no observable way from similar symptoms in other years. Even a thorough physical examination usually failed to reveal anything characteristic of poliomyelitis. Without the aid of extensive laboratory facilities there is apparently no way of diagnosing the disease in its mildest forms. At times, however, it becomes evident in the course of history taking that the incubation period between such illnesses is different from the one to two day period of the common respiratory infections and is instead from ten to fourteen days. This in itself has served at times as a useful guide to suggest that the disease in question may have been specific in nature.

Although an attempt was made to estimate the number of such minor illnesses in the community during the epidemic, the practical difficulties were so great that no reliance could be placed on the results obtained. However, the impression was gained that such illnesses were very prevalent both before and during the epidemic. The often quoted estimates of 10 to 40 abortive cases for every one in which paralysis develops would not seem unreasonable in the light of our experiences.

COMMENT

An attempt has been made in the present study to ascertain some of the circumstances which gave rise to the epidemic of poliomyelitis in the Buffalo area in 1944. Particular attention has been directed toward the possible human sources of the outbreak, since it is now well established that during such an epidemic the most common method of spread is by person to person contact. Evidence has been accumulated which points to the conclusion that the disease was prevalent in the initial community long before the first case of paralysis was recognized. This evidence is based on studies of the illnesses among contacts, both direct and

indirect, of the first 3 cases of paralysis and on a knowledge of the minor illnesses, many of which were undoubtedly caused by the virus of poliomyelitis, which occurred in the school population during the months preceding the outbreak.

Although at the time of the epidemic the first case was believed to have developed on May 23, 1944, a year later the diagnosis of paralytic poliomyelitis was made on a patient whose acute symptoms had occurred on April 12, 1944. In addition, investigation of illnesses occurring in the community during the preceding winter and spring revealed that symptoms strongly suggestive of abortive poliomyelitis had occurred as early as March 6, 1944. This was only two months after the development of 2 cases of the disease in a neighboring community—January 3. Scattered cases had occurred during the preceding summer and fall. It seems highly probable, therefore, that the virus was continuously active but unrecognized in the area for approximately a year before an "epidemic" developed.

As a result of observations on the cases of abortive poliomyelitis and minor illnesses which preceded and followed the period in which paralytic cases developed, it appears that the concept of what constitutes an epidemic of infantile paralysis should be broadened. If the virus is a prevalent cause of symptoms many weeks before the first case of paralysis and for some time after the last, it is evident that the "epidemic" extends over a much longer period than has previously been considered. From the point of view of public health and of the development of a preventive program, some modification of our definition of the term is essential. The following divisions are suggested as offering a sound basis for efforts in the future:

1. Preparalytic phase. The duration of this phase may cover several months. Minor and suggestive illnesses begin to occur in the community but no paralysis is apparent. Evidence of a prolonged incubation period should arouse suspicion.

2. Paralytic phase. The duration of the phase of paralysis tends to be upward of three to four months. During this time nonparalytic and paralytic cases of the disease are common, and suggestive and nonspecific minor illnesses tend to reach their peak. Formerly the term "epidemic" was applied only to this period.

3. Postparalytic phase. The duration of this period tends to be shorter than that of phase 1, possibly because the proportion of susceptible individuals has now become quite small. Paralytic cases have disappeared, but mild forms of the disease still continue but in decreasing numbers.

4. Interepidemic phase. The duration of this phase is at present indeterminate. Paralytic and suggestive illnesses are absent or very rare. How the virus survives during this period can only be surmised. However, it is known to survive for at least six months in the stools of healthy carriers and for about a year in a frozen state.

An "epidemic" of poliomyelitis may well be under way long before paralytic cases are recognized.

In many respects such a concept of an epidemic has striking similarities to one caused by a virulent strain of the hemolytic streptococcus. In both the etiologic factor may be widespread before the epidemic is recognized. In the one the symptoms which attract attention are scarlatiniform rash, septic sore throat, hemorrhagic nephritis and erysipelas; in the other meningeal signs and paralysis. The number of individuals harboring the causative agent is far greater than the number recognized to have characteristic symptoms. Carriers may be circulating in the community and can be detected only by laboratory tests. Both are spread largely by person to person contact. When these similarities are considered, an epidemic of poliomyelitis loses many of its peculiar features and conforms to an understandable pattern.

Why, however, if the virus is active in the community for several months, should paralytic symptoms appear only during the period of warm weather? While no definite answer can be given, several suggestions deserve consideration. First, it seems evident from this and former studies that the proportion of paralytic to nonparalytic cases is small. Only when the latter has reached a relatively high incidence level would the paralytic cases be expected to appear. The incidence of all forms is so clearly at a maximum during the summer months that it is only reasonable to expect paralysis to be most common at this time. Secondly, the clinical literature contains many reports suggesting that physical fatigue during the incubation and prodromal periods may encourage the development of paralysis. Certain it is that with the advent of warm weather children exercise far more vigorously than they are accustomed to in the winter. Two of the first 3 cases of paralysis in the present epidemic gave histories which lend support to this suggestion. The subject deserves further consideration. Thirdly, the summer season is the time of most widespread human contacts, particularly in rural areas. Certainly opportunities for person to person spread during this season of the year are many and varied, but why poliomyelitis should behave so differently from other diseases transmitted by similar means is by no means clear. Possibly the answer lies in a relatively greater resistance of the virus to sunshine and heat or to the summer state of the human host.

Mention should be made of the possible role which environmental and sanitary conditions may play in the origin and progress of a poliomyelitis epidemic. It is well known, particularly from the work of Paul and his associates,[11] that during and for some time after an epidemic the virus can be isolated from sewage, from outside toilets, occasionally from polluted and stagnant water, and in a few instances from flies which have been caught in nearby areas. Under some of these conditions the virus may remain active for several months. Theoretically, such nonhuman reservoirs would be expected to play an important role in the initiation of an epidemic and in the spread of the disease from person to person. Yet, in spite of the comparative ease with which poliomyelitis may be experimentally transferred to monkeys from these reservoirs, it has not been established that the virus in such form gives rise to the human disease. The possibility undoubtedly exists, but direct proof is still lacking. On the other hand, there is a large body of data indicating that poliomyelitis often passes from person to person by respiratory or oral transfer. The "source" usually suffers from an illness of some sort and is not a healthy carrier as ordinarily defined. This subject will be dealt with more extensively in a subsequent report.

In the community discussed in the present report a minority of the families in which paralytic poliomyelitis occurred used privies. Drainage from several of these might eventually find its way into a creek which flowed

11. Paul, J. R., and Trask, J. D.: Occurrence and Recovery of the Virus of Infantile Paralysis from Sewage, Am. J. Pub. Health **32**: 235-239 (March) 1942. Paul, J. R.; Trask, J. D.; Bishop, M. B.; Melnick, J. L., and Casey, A. E.: Detection of Poliomyelitis Virus in Flies, Science **94**: 395 (Oct. 24) 1941. Ward, R.; Melnick, J. L., and Horstmann, D. L.: Poliomyelitis Virus in Fly Contaminated Food Collected at an Epidemic, ibid. **101**: 491 (May 11) 1945.

through the township and was used for swimming below the site of the infected houses. No studies were made to determine the presence of virus in the creek, but evidence from other sources, including that presented in the first part of this report, would indicate that at best polluted streams and outside toilets could account for very few of the known cases of the disease, and almost certainly not for the first case. The evidence pointed predominantly toward a person to person transfer of the virus, most likely by means of respiratory or oral secretions. In the first reported case quite clearly the infection was acquired not "de novo" from some nonhuman source but as part of a local epidemic which had been in progress for at least three months.

The observations presented in this report offer several aids for the study of future epidemics of the disease. Perhaps most important of all is to direct attention to the interepidemic period. A greater awareness of the variety of symptoms encountered in abortive poliomyelitis might lead to earlier recognition of the disease in a community. After an epidemic has become well established it is usually too late to make the epidemiologic and laboratory investigations needed to throw light on the earliest phases of its spread. However, if teams of trained community investigators and laboratory workers could be prepared to make use of all possible developments in a particular area, there seems to be little doubt that over a period of time the torch of knowledge could be extended steadily further into the unknown. Only by such well planned and thoroughly executed labors can a sound foundation be laid for a successful preventive program.

SUMMARY AND CONCLUSIONS

A study has been made of the circumstances surrounding the development of the first 3 paralytic cases of poliomyelitis in the 1944 epidemic in the Buffalo area. The evidence indicates that these cases did not arise "de novo" but were relatively late developments in a cycle which had been in progress but unsuspected for approximately three months.

Although a period of five and one-half months elapsed between the last reported case of the preceding season and the first of the 1944 epidemic, the interval was only two months to the earliest 1944 minor illness which, based on circumstantial evidence, was caused by the virus of poliomyelitis. In view of the difficulties in recognizing such minor illnesses it seems probable that the virus was continually active in the area throughout the entire period between the two cycles.

The incidence of illnesses in the community, which were highly suggestive of being nonparalytic forms of the disease, was at least five times the number of recognized poliomyelitis cases. The week by week distribution of these suggestive illnesses followed the same general pattern as the reported cases but began earlier in the season and extended later. Other minor illnesses simulating ordinary gastrointestinal and respiratory infections were also widely prevalent.

Although no laboratory studies were made, the evidence presented suggests that the Buffalo epidemic was initiated and spread largely through direct human sources and not from polluted sewage, streams, toilets or insanitary environmental conditions.

It is suggested that the definition of an epidemic of poliomyelitis be broadened to include the preparalytic and postparalytic phases of the cycle.

219 Bryant Street, Buffalo 9.

EFFECT OF EXERCISE ON BLOOD PRESSURE OF PATIENTS WITH ADVANCED HYPERTENSION

BEFORE AND AFTER THORACOLUMBAR SYMPATHECTOMY

JERE W. LORD JR., M.D.
AND
J. WILLIAM HINTON, M.D.
NEW YORK

The most important measure of the value of an operation designed for the treatment of hypertension is the degree of fall in the blood pressure postoperatively. When results are discussed, the change in the levels of the blood pressure far outrank in importance the other measures of improvement, such as symptomatic relief, regression in cardiac size, improvement in the electrocardiogram and the eyegrounds. Smithwick [1] has emphasized the need for determining the blood pressure in the lying, sitting and standing positions preoperatively and postoperatively because of the significant effect of posture on its level.

TABLE 1.—*Average Blood Pressure Levels of Thirty Patients*

	Resting	Standing	After Exercise
Preoperative	200/122	202/132	223/138
Postoperative	160/107	141/103	158/106

TABLE 2.—*Analysis of Change in Blood Pressure Levels of Thirty Patients Following Exercise*

	Fall	Same	Rise
Preoperative			
Systolic	3	1	26
Diastolic	3	1	26
Postoperative			
Systolic	15	5	10
Diastolic	12	8	10

As a result of some interesting experimental data obtained by Blakemore and King,[2] we have studied the effect of moderate exercise on the blood pressure of a group of patients suffering from advanced hypertension before and after thoracolumbar sympathectomy. Blakemore and King observed that the blood pressure of normal dogs exercised on a treadmill did not change significantly. However, if the animals were sympathectomized, similar exercise resulted in a definite fall in the blood pressure, the fall being roughly proportional to the magnitude of the sympathectomy.

Another point of importance is the fact that patients with hypertension in all but the terminal stage are individuals who are exercising to a greater or lesser extent in their daily activities and experiencing emotional situations, both factors being quite different from the more or less basal conditions of blood pressure determinations as emphasized by Smithwick in the study of patients before and after sympathectomy.

We have determined the blood pressure in 30 consecutive ambulatory patients before and after sympathectomy in the following way:

The patient lies quietly for five minutes, when the blood pressure is taken; the patient assumes the sitting

1. Smithwick, R. H.: Surgical Treatment of Hypertension, Arch. Surg. **49**: 180-193 (Sept.) 1944; The Surgical Treatment of Hypertension, New York State J. Med. **44**: 2693-2700, 1945.
2. Blakemore, A. H., and King, B.: Personal communication to the authors.

position and the blood pressure is taken after one minute has elapsed; the standing position is next taken and after one minute the blood pressure determined and then the patient exercises by stepping up and down onto a low footstool first with one leg then with the other for twenty times in all and with each step raises the arms from the side anteriorly to the horizontal level. Postoperatively the same routine is repeated when the patient is sufficiently strong to carry out the exercise test.

The results are interesting and lend added weight to the value of thoracolumbar sympathectomy in the treatment of hypertension. Table 1 shows the average systolic and diastolic blood pressure levels of the 30 patients determined first in the lying position, then in the standing position and finally after the exercise test. Also shown are the averages for the same patients following the two stage thoracolumbar sympathectomy. It is noteworthy that preoperatively exercise elevates the systolic by 23 mm. of mercury and the diastolic by 16 as compared with the resting levels. On the other hand, postoperatively exercise causes no significant change in the level of the blood pressure. Further, a comparison of the preoperative and postoperative resting diastolic levels reveals a fall of 15 mm., which places the entire group into group III of Smithwick. However, a comparison of the preoperative and postoperative diastolic levels after exercise shows an average fall of 32 mm.; in other words, Smithwick's group I. Chart 1 illustrates in another way these data.

An analysis of the data obtained from the study of the effect of exercise on levels of the 30 patients before and after sympathectomy reveals that 26 patients preoperatively showed a rise in the diastolic level, in 1 there was no change, and in 3 exercise caused a slight fall. The postexercise level was compared with the resting level in each instance. Precisely the same proportion held for the systolic levels. However, postoperatively the exercise study showed a fall in the diastolic in 12 patients, no change in 8 and a rise in 10, the average figure being 107 to 106 mm. (table 1). Of the systolic levels 15 fell, there was no change in 5, a rise occurred in 10 and there was an average of 160 to 158 (table 1). These data are shown in table 2.

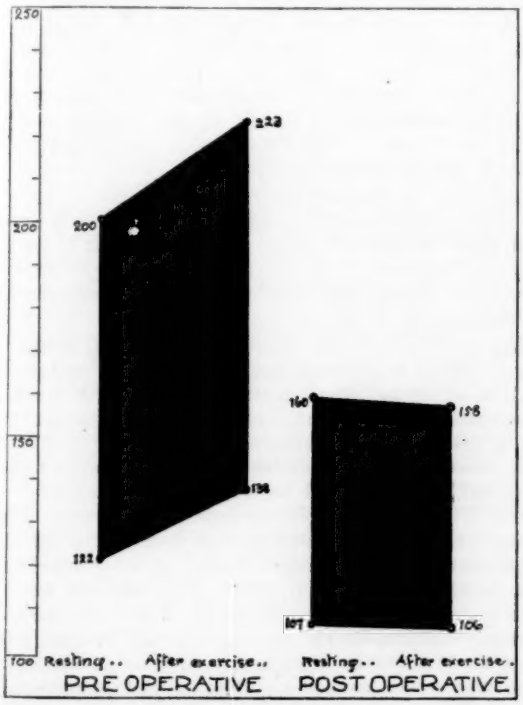


Chart 1.—Preoperative and postoperative diastolic levels.

The levels of blood pressure obtained from 1 of the patients illustrating the effect of exercise before and after thoracolumbar sympathectomy are presented in chart 2. The patient was a white man aged 42 with malignant hypertension, having an elevated nonprotein nitrogen level of 50 mg. per hundred cubic centimeters, the eyegrounds showing hemorrhages, exudate and papilledema and there being a urea clearance of 27 per cent. The resting blood pressure of 280/180 rose to 300/195 following exercise. One month postoperatively his resting level was 145/125, which after exercise fell to 110/100. Symptomatically the patient feels much improved. Three months postoperatively the patient's resting blood pressure was 130/80 and a urinalysis showed no albumin or red blood cells, in contrast to the preoperative examination, which revealed innumerable red blood cells and over 100 mg. of albumin per hundred cubic centimeters.[3]

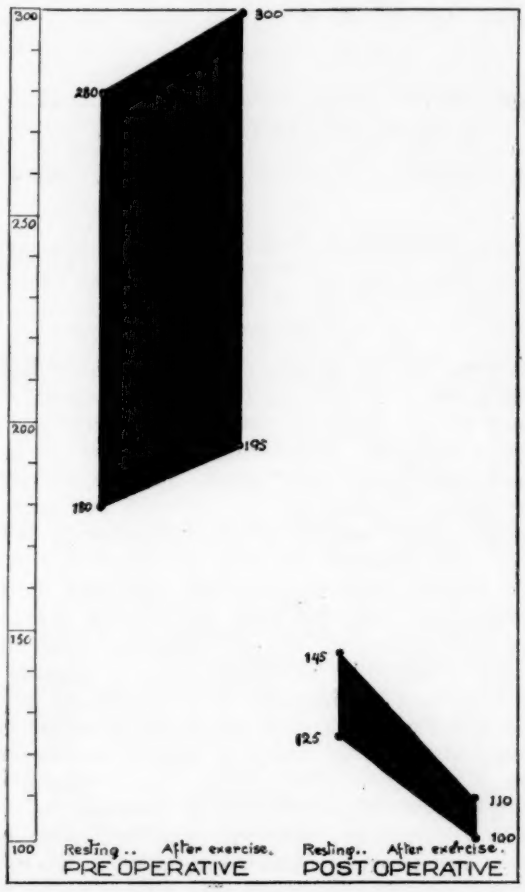


Chart 2.—Effect of exercise before and after thoracolumbar sympathectomy.

SUMMARY

To our knowledge the favorable influence of exercise on the blood pressure of patients with advanced hypertension following thoracolumbar sympathectomy has not hitherto been mentioned. In the series of 30 patients discussed in this paper the average postoperative fall in the resting diastolic blood pressure was 15 mm. However, when the preoperative and postoperative

3. Lewis, W. H., Jr.: Personal communication to the authors.

diastolic levels following exercise were compared, an average fall of 32 mm. was observed.

The evidence further emphasizes the value of thoracolumbar sympathectomy as a therapeutic measure in the management of patients suffering from advanced hypertension.

130 East Seventy-Ninth Street.

INSOMNIA DUE TO LEFT VENTRICULAR HEART FAILURE

UNRECOGNIZED AS SUCH AND INADEQUATELY TREATED

EDWIN O. WHEELER, M.D.
AND
PAUL D. WHITE, M.D
BOSTON

The signs and symptoms of left ventricular failure have been described frequently, and their clinical significance is well known. Certain symptoms, namely exertional dyspnea, paroxysmal nocturnal dyspnea, orthopnea and sometimes cough, and certain signs, namely gallop rhythm, pulsus alternans and increase of the pulmonary second sound, are generally recognized as early evidence of failure of the left side of the heart. Patients with dyspnea and orthopnea do not, as a rule, sleep well, but little space in the literature has been devoted to the insomnia resulting from these symptoms other than to mention that it occurs, for in most patients the insomnia is of secondary importance. Relief of pulmonary congestion by either digitalis or diuretics often causes a striking improvement in the patient's condition, and as the orthopnea disappears so does the accompanying insomnia.

There are patients, however, with left ventricular failure and pulmonary vascular congestion in whom the principal complaint is insomnia with little or no recognition of shortness of breath. In reviewing the literature we were unable to find any discussion of such cases. The following cases are therefore of interest:

CASE 1.—A business man aged 69 was first seen medically by us for a check-up in November 1941. Hypertension had been found a year before, but the patient had noticed no symptoms. On physical examination his heart was found to be slightly enlarged, and there were slight apical and aortic systolic murmurs. The pulse was regular at a rate of 80, and the blood pressure was 220 mm. systolic and 140 mm. diastolic. There was no evidence of congestive failure. Fluoroscopy of the chest showed moderate cardiac enlargement without pulmonary congestion. An electrocardiogram was normal.

He remained in good health until December 1942, when he began to suffer from substernal pressure on effort. This symptom progressed in frequency until May 1943, when he had several nocturnal attacks culminating in an episode of substernal oppression with radiation to the arms and jaw, which lasted many hours. He was admitted to the hospital, where an electrocardiogram confirmed the diagnosis of acute myocardial infarction. Physical examination was unchanged except for the presence of a very slight aortic diastolic murmur. He made an uneventful recovery and was sent home without any medication.

During the next year he continued to do well, working as usual, but his blood pressure remained high and his heart size increased a little. In June 1944 he developed a thrombosis involving the optic tracts and had a partial hemianopsia, from which he largely recovered in a few weeks time. In September, because of the finding of a larger heart and a slight diastolic gallop rhythm, he was digitalized. There was no evidence of pulmonary congestion, but left ventricular failure was thought to be impending.

His health remained about the same until late in December 1944, when he began to complain of insomnia. During the next few weeks his insomnia became more severe and did not respond to various hypnotics. He also began to complain of having to sit up nights and of increased dyspnea on exertion. Examination revealed a return of the gallop rhythm, accentuation of the pulmonary second sound and a slight increase of the jugular pulse. The lungs were clear. On a regimen of ammonium chloride, increased digitalis and limited fluids and salt he immediately improved and was able to sleep well again. He then continued to be active and slept well until Jan. 26, 1945, when he had a brief episode of acute pulmonary edema, which responded to rest and diuretics.

CASE 2.—A business man aged 54 was first seen by us in February 1943 with complaints of nervousness, palpitation and fatigue and a history of hypertension for the previous twenty-five years. For several years he had been taking digitalis because of an irregular pulse, but there had been no episodes of congestive failure. Physical examination revealed a blood pressure of 172 mm. systolic and 102 mm. diastolic at a pulse rate of 72. The heart was enlarged, but the sounds were of good quality and there were no murmurs. No evidence of congestive failure was found. Fluoroscopy of the chest revealed slight fulness of the left ventricle but no pulmonary congestion. An electrocardiogram showed auricular fibrillation at a rate of 70, with sagging of the ST segments, presumably due to digitalis effect. A diagnosis was made of hypertensive heart disease and auricular fibrillation.

The patient improved and remained well until May 1943, when he noted the gradual onset of shortness of breath on exertion, culminating in several brief attacks of paroxysmal nocturnal dyspnea. Examination at that time revealed slight orthopnea, increased venous pulse in the neck, increased heart size, a diastolic gallop rhythm, a slight (grade 2) apical systolic murmur and signs of congestion with fine rales at the lung bases, liver enlargement and slight sacral edema. Left ventricular failure secondary to hypertension was considered to be the predominant cause of his symptoms, and treatment with diuretics was recommended. He improved rapidly and did well for a short time thereafter.

He was seen at frequent intervals during the summer and fall of 1943, complaining of progressive insomnia and nocturia without other urinary difficulties. Examination at these visits showed no evidence of peripheral or pulmonary congestion, and the heart sounds had improved, with a disappearance of the gallop rhythm.

During the late fall his insomnia grew much worse, and though he stated that he did not have shortness of breath he insisted on sitting in a chair most of the night. A number of sedatives and hypnotics were tried without giving him relief, generally producing disorientation. He gradually became so restless, nervous and apprehensive that commitment to a mental hospital was considered and he was therefore seen by a psychiatrist. The latter thought the patient might have a toxic psychosis. In December 1943 he was hospitalized for study. On examination he presented evidence of congestive failure with a return of the jugular pulse, gallop rhythm, an apical systolic murmur and liver enlargement. The lungs were clear on physical examination, but an x-ray film of the chest showed the lung markings to be prominent. All sedation was stopped, and he was given ammonium chloride and mercupurin, in addition to the digitalis and the fluid and salt restriction already in use. He had a good diuresis with an increase in his vital capacity from 2.8 to 4.0 liters, a disappearance of his congestive failure and complete relief of his insomnia. His mental state improved immediately, and within a few days he felt normal. After a few weeks of rest in the hospital he went home greatly improved.

For six months he continued to feel well without insomnia or evidence of congestion. He did not require mercurial diuretics. In August 1944 he again complained of insomnia without

shortness of breath, and examination showed a return of the congestive failure. Again the insomnia disappeared when his daily ration of digitalis was increased and mercurial diuretics were given. He has remained fairly well to the present time without symptoms of sleeplessness and with his congestive failure under control.

CASE 3.—A man aged 65, a lawyer, was first seen by us in October 1941, eight months after a typical myocardial infarction. He had no cardiac complaints at that time. Examination showed slight cardiac enlargement and a slight aortic systolic murmur. The blood pressure was 160 mm. systolic and 100 mm. diastolic at a pulse rate of 72. There was no evidence of congestive failure. Fluoroscopy of the chest confirmed the presence of slight cardiac enlargement without evidence of pulmonary congestion. An electrocardiogram showed evidence of an old anterior myocardial infarction. A diagnosis was made of coronary heart disease and a healed myocardial infarct.

He then remained quite well until February 1944, when he entered the hospital because of restlessness and sleeplessness at night, slight swelling of his ankles and a low grade fever. He had noted some increased exertional dyspnea but stated that he did not have shortness of breath at night. He was, however, more comfortable sitting in a chair or walking about the room. Examination showed increased heart size, pulmonary congestion, hepatic congestion and slight pitting edema of the legs, more pronounced on the right. An x-ray film of the chest confirmed the increased heart size and showed the lung markings to be prominent, suggesting vascular congestion. This episode of congestive failure was probably precipitated by a pulmonary embolus originating from a thrombophlebitis of the right leg, though pulmonary infection could not be ruled out. Treatment was begun with digitalis, ammonium chloride and mercupurin. He had a good diuresis and soon lost the evidence of congestive failure. With this the nocturnal restlessness disappeared, though he did not notice much difference in his breathing.

After discharge from the hospital he remained relatively inactive at home, continuing to have exertional dyspnea but no evidence of congestive failure. Four months later, in June 1944, he was again seen because of insomnia and restlessness at night, symptoms which had disturbed the rest of the family. He preferred to sit up at night but stated that he did not have shortness of breath, as on the previous occasion. Examination showed evidence of congestive failure. Another course of diuretics relieved the congestion and he again slept much better.

In August 1944 congestive failure was again precipitated, this time by ventricular tachycardia without evidence of a recent myocardial infarction. Since that episode he has done poorly, with constant peripheral and occasional pulmonary congestion.

CASE 4.—A man aged 70, a real estate broker, first seen by us in October 1942, was complaining of painful spasms in the epigastrium coming on after eating, but he had no cardiac complaints. Five years before he had been told of the presence of heart disease and had been advised to limit his activities. Examination revealed moderate cardiac enlargement, a loud (grade 4 to 5) harsh aortic and apical systolic murmur, and along the left sternal border a slight early diastolic murmur. There was a systolic thrill over the aortic area. The blood pressure was 170 mm. systolic and 95 mm. diastolic, and the pulse was regular at a rate of 60. There was no evidence of congestive failure. Fluoroscopy of the chest showed a big heart without evidence of pulmonary congestion. His electrocardiogram was abnormal but of no characteristic pattern. A diagnosis was made of aortic stenosis and insufficiency on a calcareous and possibly rheumatic basis.

The patient continued to have no cardiac symptoms until January 1943, when, following a good deal of hard physical work, he began to be bothered almost nightly by a sensation of fulness in the epigastrium and very slight dyspnea, lasting one half to three quarters of an hour. This was relieved when he sat up. Examination showed no changes, and the lungs were clear. Since it was suspected that congestive heart failure was the cause of the nocturnal distress, the patient was digitalized and instructed to rest. The symptoms soon disappeared and again he slept well.

In April 1943, following a day of hard physical work, the symptoms recurred, especially the epigastric distress, which awakened him at frequent intervals. This was accompanied by only a little dyspnea, which did not bother the patient. He did notice, however, more than his ordinary dyspnea on exertion. Physical examination revealed no significant change, and the lungs were clear. On a program of increased rest his symptoms again improved, and he was able to sleep without discomfort.

During the past year and a half he has continued to have insomnia, epigastric distress and slight dyspnea from time to time, usually precipitated by overexertion and relieved by rest and diuretics, and recently by a very low salt diet.

COMMENT

Insomnia as a presenting symptom of pulmonary vascular congestion has been generally neglected, because obvious dyspnea, orthopnea or Cheyne-Stokes respiration is usually also present and dominates the clinical picture. Insomnia may, however, be an early and predominant symptom of pulmonary congestion due to left ventricular failure, in cases in which dyspnea is not a prominent complaint. In these cases the insomnia is likely to be misjudged as a symptom of heart failure and ascribed to some other cause. Especially is this true in the absence of basal rales. The insistence of the patient on sitting up, which is evidence of ill defined orthopnea, in the presence of physical signs of left ventricular weakness (gallop rhythm, pulsus alternans and accentuation of the pulmonary second sound) may lead to a recognition of the etiology of the sleeplessness.

Thus it behooves the physician dealing with patients who show features of strain on the left ventricle, namely hypertension in particular, aortic valve disease (stenosis or regurgitation) and extensive myocardial infarction, acute or chronic, to be constantly on guard to watch for early dyspnea, either on effort or as a cause of insomnia, so that adequate treatment may be speedily prescribed to combat the left ventricular weakness and failure which are responsible. The significance of obvious dyspnea is common knowledge and receives as a rule adequate treatment, but the insomnia is likely to be misinterpreted and vainly or inadequately controlled by hypnotics, often causing a serious delay of days or weeks before the signs of increasing heart failure become so evident that radical or emergency treatment proves necessary. At such later stages of heart failure insufficiency of the right ventricle (as shown by increased systemic venous pressure, liver enlargement and dependent edema) tends to appear, and if such right ventricular failure becomes pronounced the pulmonary congestion, and with it the insomnia, may lessen, but painful liver enlargement may take its place and in its turn also cause some insomnia. Rest and digitalis alone may suffice to control the orthopnea and insomnia of early left ventricular failure, but sometimes it is necessary to resort to diuretics, especially the mercurials, in repeated dosage and to a very low salt diet (which will be the subject of a later communication).

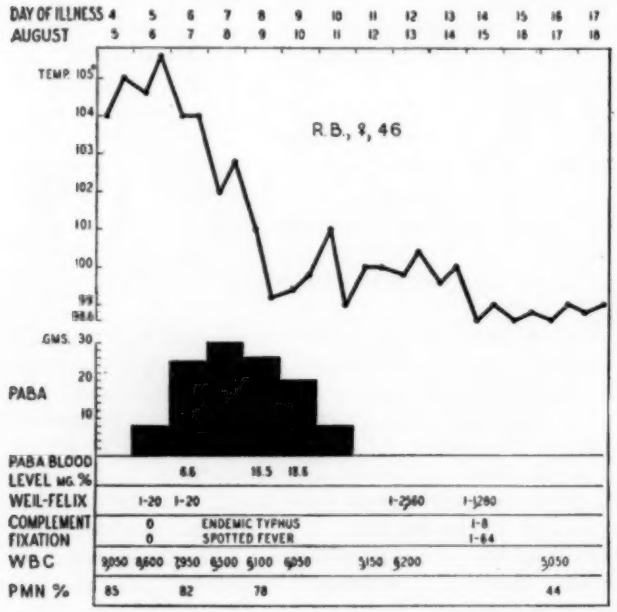
SUMMARY

Insomnia is a frequent symptom of left ventricular heart failure and in some cases is unrecognized as such and therefore inadequately treated because of the tendency to overlook the underlying pulmonary congestion and resulting orthopnea.

THE TREATMENT OF SPOTTED FEVER WITH PARA-AMINOBENZOIC ACID

HARRY M. ROSE, M.D.
RICHARD B. DUANE, M.D.
AND
EDWARD E. FISCHEL, M.D.
NEW YORK

For a long time attempts have been made to find a chemotherapeutic agent of value in rickettsial diseases, and recently such a substance apparently has been found in para-aminobenzoic acid. Snyder, Maier and Anderson [1] were the first to show that the oral administration of this compound would effectively reduce the mortality from experimental murine typhus in white mice, while Hamilton, Plotz and Smadel [2] found that para-aminobenzoic acid would inhibit the growth of both epidemic and murine typhus rickettsias in the developing hen's egg, thereby prolonging the survival time of infected chick embryos. These observations were independently confirmed by Greiff, Pinkerton and Moragues,[3] who studied the effects of para-aminobenzoic acid on infections with murine typhus rickettsias in both eggs and mice. The work of all these investigators indicated that para-aminobenzoic acid did not exercise a direct lethal action on the rickettsias but interfered in some way with their proliferation within tissue cells, probably by the modification of as yet unidentified enzyme systems. Moreover, para-aminobenzoic acid alone would produce these effects; substituted compounds and the ortho and meta forms of the drug were entirely inactive.



Course of illness.

Clinical application of this knowledge was made by Yeomans, Snyder, Murray, Zarafonetis and Ecke [4] of the United States of America Typhus Commission, who studied the therapeutic effect of para-aminobenzoic acid on human louse borne typhus in Cairo, Egypt. Their results in 20 treated cases, compared with those in 44 untreated controls, indicated that the course of the disease could be favorably modified, provided the drug was given within the first week of the illness. Large doses of the compound, from 24 to 28 Gm. every twenty-four hours, were given orally in order to obtain adequate blood concentrations, which were considered to be between 10 and 20 mg. per hundred cubic centimeters; but no toxic reactions were encountered other than temporary reduction in the leukocyte counts in some cases.

That para-aminobenzoic acid may also be of value in the treatment of rickettsial infections other than typhus fever is suggested by the experiments of Anigstein and Bader,[5] who found the drug to be very effective therapeutically in guinea pigs infected with Rocky Mountain spotted fever rickettsias. Control guinea pigs inoculated intraperitoneally with the spotted fever rickettsias invariably succumbed, while of those fed para-aminobenzoic acid as 2 per cent of the diet nearly all recovered with few or no signs of illness. Furthermore, Hamilton [6] has recently reported that para-aminobenzoic acid inhibits the growth of spotted fever rickettsias in chick embryos to an even greater extent than typhus rickettsias.

Since no clinical reports on the use of para-aminobenzoic acid in the treatment of spotted fever in the human subject have yet appeared, we present the following case, in which administration of the drug soon after the onset of symptoms of the disease was followed by rapid and uneventful recovery.

REPORT OF CASE

History.—R. B., a white American woman aged 46, a housewife, was admitted to the Presbyterian Hospital on Aug. 5, 1945 with complaints of malaise and fever of three days' duration, headache of two days' duration and a rash which appeared on the day of admission.

The past history was irrelevant to the present illness.

Nine days before admission, after a day spent in central Long Island, N. Y., the patient discovered a tick firmly attached to the left buttock. The insect was removed with difficulty, and a small pustular lesion developed at the site of attachment. Three days before admission she noted the onset of generalized malaise, with muscular aches and pains, and she had a shaking chill. The following day anorexia developed, with mild nausea, feverish sensations and a constant, throbbing retro-orbital headache that became progressively more severe. She also became drowsy and a little disoriented. On the day of admission a spotted skin eruption first appeared on the lower part of the left leg.

On entry to the hospital the temperature was 104.4 F., the pulse rate 120, the respiratory rate 24 and the arterial pressure 120/70. The patient, who was well developed and nourished, did not appear to be in acute distress. Scattered over the body, but especially on the extremities and the palms of the hands, was a pinkish macular rash which blanched easily on pressure. The individual cutaneous lesions were discrete and averaged about 3 mm. in diameter. There was no enanthem. A small pustule, surrounded by a zone of erythema, was found

From the Departments of Medicine and Bacteriology, Columbia University College of Physicians and Surgeons, and the Presbyterian Hospital.

1. Snyder, J. C.; Maier, J., and Anderson, C. R.: Report to the Division of Medical Sciences, National Research Council, Dec. 26, 1942.

2. Hamilton, H. L.; Plotz, H., and Smadel, J. E.: Report to the Director of the United States of America Typhus Commission, Dec. 16, 1943, published as Effect of p-Aminobenzoic Acid on the Growth of Typhus Rickettsiae in the Yolk Sac of the Infected Chick Embryo, Proc. Soc. Exper. Biol. & Med. **58**: 255-262 (April) 1945.

3. Greiff, Donald; Pinkerton, Henry, and Moragues, Vincente: Effect of Enzyme Inhibitors and Activators on the Multiplication of Typhus Rickettsiae: I. Penicillin, Para-Aminobenzoic Acid, Sodium Fluoride and Vitamins of the B Group, J. Exper. Med. **80**: 561-574 (Dec.) 1944.

4. Yeomans, Andrew; Snyder, J. C.; Murray, E. S.; Zarafonetis, C. J. D., and Ecke, R. S.: The Therapeutic Effect of Para-Aminobenzoic Acid in Louse Borne Typhus Fever, J. A. M. A. **126**: 349-356 (Oct. 7) 1944.

5. Anigstein, Ludwik, and Bader, M. N.: Para-Aminobenzoic Acid—Its Effectiveness in Spotted Fever in Guinea Pigs, Science **101**: 591-592 (June 8) 1945.

6. Hamilton, H. L.: Effect of p-Aminobenzoic Acid on Growth of Rickettsiae and Elementary Bodies, with Observations on Mode of Action, Proc. Soc. Exper. Biol. & Med. **59**: 220-226 (June) 1945.

on the left buttock at the site of the tick bite. The remainder of the examination was essentially negative. The heart and lungs were not remarkable. The abdomen was soft and the spleen could not be palpated. There was no lymphadenopathy. The reflexes were intact.

The admission diagnosis was Rocky Mountain spotted fever. Laboratory examinations revealed hemoglobin 13.5 Gm., erythrocytes 5,030,000, leukocytes 9,050, with polymorphonuclears 85 per cent, lymphocytes 11 per cent and monocytes 4 per cent. The urinalysis was negative except for a heavy trace of albumin. The Kline test was negative. Two blood cultures remained sterile. Cultures of the nose and throat failed to reveal either hemolytic streptococci or meningococci. Stool cultures yielded no enteric pathogens. The Widal test, with Salmonella group A, B, C and D antigens, was negative.

Weil-Felix agglutinative tests with Proteus OX19 on August 5 and 6, the fourth and fifth days of the illness, were both positive in a titer of only 1:20. On August 13, however, the titer had risen to 1:2,560, and on August 15 the titer was 1:1,280.

Serums were submitted to Dr. I. A. Bengtson [7] at the National Institute of Health, Bethesda, Md., for complement fixation tests with specific rickettsial antigens. Dr. Bengtson reported that serum drawn on August 6 gave negative complement fixation reactions with both murine typhus and spotted fever antigens, while serum taken on August 15 gave positive reactions in dilutions of 1:8 with the typhus antigen and 1:64 with the spotted fever antigen.[8]

Guinea pigs inoculated intraperitoneally with whole blood taken on the fifth day of illness developed characteristic febrile reactions, transmissible in series, and rickettsias were demonstrated in the yolk sacs of developing hen's eggs inoculated with whole blood and plasma taken the same day.

Course.—Throughout the first two days of the patient's stay in the hospital a high sustained fever ranged to 105.8 F., as illustrated in the chart, and she was drowsy and irritable. During this period the rash became more pronounced and hemorrhagic in character, and on the second day there was a small epistaxis.

Thirty-six hours after admission therapy was started with para-aminobenzoic acid, 4 Gm. initially and then 2 Gm. in 25 cc. of chilled 5 per cent sodium bicarbonate every two hours. The drug caused some nausea, necessitating omission of occasional doses, and therefore the individual dose was raised to 2.5 Gm. the following day, during which 25 Gm. was given. Treatment was continued for four days subsequently, the total daily intake being 30, 26, 20 and 8 Gm. respectively.

Blood levels of the drug were calculated by a method used for the determination of sulfonamides and were 6.6, 16.4 and 18.6 mg. per hundred cubic centimeters on the second, fourth and fifth days of treatment.

Following the first twenty-four hours of therapy with para-aminobenzoic acid clinical improvement was evident and continuous, with a rapid decline of fever and alleviation of headache, drowsiness and irritability. The rash quickly subsided and was almost inapparent by the end of the first week. No fresh physical signs appeared except for a palpable spleen tip noted from the fifth to the eighth day.

On the whole, the drug was well tolerated and produced no toxic effects other than perhaps a moderate depression of the leukocytes noted during convalescence.

Ten days after entering the hospital the patient was entirely asymptomatic, and her subsequent course was uneventful. She was discharged three weeks after admission.

COMMENT

The history of tick bite, the clinical manifestations of the disease, the results of the serologic tests and the recovery of the etiologic agent leave no question that the patient suffered from Rocky Mountain spotted fever. This disease is sometimes fatal, often severe, and usually pursues a febrile course for at least ten days.[9] The administration of para-aminobenzoic acid in amounts sufficient to give blood levels as high as 18.6 mg. per hundred cubic centimeters of a diazotizable substance [10] was closely followed by a precipitous drop in temperature and a rapid defervescence of signs and symptoms. Although we cannot conclude from a single case that these effects were directly attributable to the drug, their relationship suggests that such was the case. Further reports on the use of para-aminobenzoic acid in the treatment of spotted fever will doubtless be forthcoming from other sources where opportunities to observe the disease occur more frequently than in the city of New York.

SUMMARY

A case of Rocky Mountain spotted fever was treated with para-aminobenzoic acid. The results suggest that the drug exercised a beneficial effect on the course of the disease.

620 West 168th Street, New York 32.

7. Bengtson, I. A.: Applications of the Complement Fixation Test in the Study of Rickettsial Diseases, Am. J. Pub. Health. **35**: 701-707 (July) 1945.

8. A later sample of serum taken on September 4 gave a positive complement fixation reaction in a titer of 1:512 with spotted fever antigen and a completely negative reaction with endemic typhus antigen.

9. Virus and Rickettsial Diseases, Cambridge, Harvard University Press, 1940, pp. 853-856.

10. The proportion of the drug converted to para-aminohippuric acid is unknown.

Special Article

OPPORTUNITIES FOR THE MEDICALLY TRAINED IN PUBLIC HEALTH

THOMAS PARRAN, M.D.
SURGEON GENERAL, U. S. PUBLIC HEALTH SERVICE

NOTE.—*This article was prepared especially for* THE JOURNAL. *It indicates opportunities and responsibilities in the field of public health.*—ED.

The nation needs physicians to man its state and local health departments. At this time of demobilization, young medical officers especially are urged to give consideration to useful careers in public health.

A recent survey conducted by the Public Health Service reveals that there are 3,000 full time medical positions in state and local health departments. Nearly 900 of these positions are now vacant. Half of these vacant positions are being held for individuals on leave in the military services. The other half are vacancies without restrictions waiting to be filled by qualified physicians.

These positions call for people with special training in public health. Already the several schools of public health are sensing the increased demand for training which leads to the degree of master or doctor of public health.

The various types of full time medical positions in public health departments include health officers, assistant health officers, epidemiologists, directors of bureaus in the field of tuberculosis and venereal disease control, laboratories, maternal and child health, industrial hygiene and in state supervision of local health administration.

The physician practicing the specialty of public health has for his patient the entire community, whose characteristics are as varied and complicated as the physiologic, anatomic and personality traits of the individual—a patient subject to the same pathologic processes as the individuals who make it up.

The health officer occupies an administrative position directing the work of full and part time physicians

and dentists, public health nurses, public health engineers, health educators, veterinarians, statistical analysts, laboratory people and others. The health officer's task is one of protecting the health of the community as a whole.

With the aid of his staff, the health officer must plan the local health program and decide what needs to be done for community health protection. To do so, he must acquaint himself with the local health problems. He must understand the process of evaluation of health activities and health facilities. He must know the death rates and morbidity rates from different causes. He must become acquainted with rates in other communities that he may interpret the problems in his own community soundly. He must know administration, how to give leadership to his staff and how to get along with people, professional and lay.

His field of operations is only partly medical. It also encompasses engineering and sanitary problems, social problems and research—administrative, laboratory and field.

The health officer must concern himself with securing complete pasteurization of the milk supply. He will have to ferret out the causes of the mysterious occurrence of typhoid or undulant fever. He should be ingenious enough to induce people with tuberculosis to go to and stay in a sanatorium. He may even have to develop community support to provide tuberculosis hospitals. His interest must encompass the cleanliness of dishes in restaurants, the wholesomeness of food supplies, the protection of swimming pools.

He should do something more than wait till a full fledged case of tuberculosis or syphilis is reported. He must find and examine contacts and get them under treatment either with private physicians or in public clinics. He is interested in therapy, but even more he is interested in prevention. He sees to it that young children are adequately protected against diphtheria, whooping cough and smallpox. He encourages starting dental care early in life and continuing it throughout life. This interest is not just academic or passive. His job is to see that people get needed service.

In some areas he will be a hospital administrator as well as direct a health department staff. In anticipation of trends in medical care, he needs to know about administration of the different forms of prepaid hospital and medical care.

He is concerned with the salaries of his staff, with equitable rules for sick leave and vacations, retirements and pensions and in-service training of his staff. He must be considerate, sympathetic, fair and at times stern. He must keep informed and up to date on scientific advances in medicine and public health.

In preventing illness he will have to teach the public, and, to do so himself and have his staff do so, he must be aware of the educational principles of learning. He must be willing to learn from educators and seek and utilize educational advice.

There are satisfactions in being a health officer—different satisfactions from those that come to a general practitioner but still heart warming and real. The health officer doesn't have to get up at 2 a. m. and drive several miles to attend a woman in labor, but he will have to attend some evening meetings and discuss with groups maternal care and child care and numerous other topics.

In wrestling with major health problems and in developing programs to reduce the health hazards of his community, the local health officer is afforded unusual opportunity for leadership in preventive medicine among the medical profession and the general population. Because of the tangible contributions which he makes to the health and welfare of the area, the enterprising health officer can easily win the esteem and cooperation of all groups regardless of their economic or social status, their religious or political affiliation.

In the military services, approximately 60,000 physicians have been experiencing the financial security of a fixed salary. A similar security is offered in most public health positions. Salaries will range generally from $4,000 to $6,000 a year, with no additional personal expense of maintaining an office and equipment and employing a nurse or assistant. In the more important positions, salaries will run above $6,000 and up to $10,000 a year. The extension of state merit systems, with their salary classification, promotion and, particularly, retirement or pension plans, and their provisions of liberal annual and sick leave, enhance the feeling of security. Furthermore, with the growth and expansion of public health departments there is increasing recognition of the necessity of salary advancement to attract and hold able people. While public health specialists may not command a salary comparable to the income of the most prosperous practitioners, in general over the years their salaries will compare not unfavorably with the net income of practicing physicians in most communities.

It must not be overlooked also that public health experience is a valuable asset to the physician who seeks other fields of service. Private associations, business and industry frequently are on the lookout for persons with these qualifications at even more attractive salaries than those mentioned.

In other positions than that of health officer, medical men with public health training will plan and direct special services for the larger health departments—tuberculosis, venereal diseases, child hygiene and the like. This will provide a closer contact with the clinical field and with hospital service. But it will also call for administrative duties and teaching experience.

How does a young medical man or woman enter the field of public health? Let us follow the main highway, the most desirable route to pursue, recognizing that there are bypaths and shortcuts which are necessary for some who are unable to take the full journey, or are permissible for others who have already made part of the trip in previous public health experience.

The approved route through training to a full-fledged job starts with an orientation course in a state or local health department. Here for six months to a year the young candidate works and is paid by the health department as a health officer or epidemiologist in training, or as a junior health officer. Different titles are used in different states. The position is a subordinate one without administrative responsibility but with a chance to see and feel what goes on in a health department. Assignment may be in a tuberculosis clinic or as an assistant to an epidemiologist in the field. The assignment may be changed several times during the training period.

This orientation course or "trial flight" is designed for two purposes, to permit the candidate to decide whether he really likes this field of work and wants to continue, and to permit the employer to decide whether the candidate has the stuff in him to make a good health officer and whether he is worth a further investment in training.

At the successful conclusion of this period, the candidate would enter an accredited school of public health in the fall term for his academic training. At the end of eight or nine months, again if successful, he would receive a degree of Master of Public Health. He would then be assigned to a field training center for a period of three months to a year. This would be a selected local health department, equipped to provide individual attention to the student. Here, as an assistant health officer and under guidance, he would receive practical field experience. He would carry responsibility.

At the end of this period he would be appointed to a regular position as health officer in a smaller community or assistant health officer in a larger community. He is now launched on a public health career.

Young medical graduates who desire to enter the public health field, on leaving the military services, have several paths open to them. Application for training may be made directly to a school of public health. Ordinarily the course begins in the autumn term, and arrangements should be completed from three to six months ahead of time. The schools are experiencing increased registrations, and their facilities are limited. However, to meet the present emergency they have expressed a willingness to adjust their program accordingly and will admit a few students during the term or at the beginning of the second term around February 1.

Another procedure is to write to the state department of health in the capital city of the state of residence. Owing to the pressing need for medical men, an appointment may be secured for the time being, with training in a school of public health to follow later.

Physicians previously employed in state or local health departments should of course get in touch with their former employer and request training at the first convenient opportunity.

The schools within the group known as the Association of Schools of Public Health are eight in number and are located at Columbia University, New York; Harvard University, Boston; Johns Hopkins University, Baltimore; University of Michigan, Ann Arbor; University of Minnesota, Minneapolis; University of North Carolina, Chapel Hill; Vanderbilt University, Nashville, Tenn., and Yale University, New Haven, Conn.

Physicians leaving the military service who can qualify are entitled to financial aid in training under the G. I. Bill of Rights. This provides from $50 to $75 a month subsistence allowance and up to a maximum of $500 a year for tuition and university fees. Application for these aids should be taken up with the educational counselor at the camp or separation center or may be made directly to the manager, Veterans Administration, at the nearest state office.

For those unable to meet the cost of professional training on these allowances, state funds are available under the federal grants-in-aid. These funds are granted to employees of state and local health departments, and application should be made to the local health officer or directly to the state department of health.

In some instances where state funds for training are not available, applicants may write to the Professional Training Unit, Division of Public Health Methods, U. S. Public Health Service, Bethesda 14, Md. Every effort will be made to place applicants in touch with some of the foundations having fellowships available.

While the foregoing description has focused on the induction of medical people into public health training, it should be remembered that training with financial aids as described is likewise open for dentists, public health engineers, public health nurses, statistical analysts, laboratory workers, health educators, veterinarians and others whose qualifications are adequate and who wish graduate training in preparation for a career in public health.

The war has dramatically demonstrated what consistent application of the principles of public health by trained personnel can do in maintaining the health of the population. In the postwar period the same high quality of public health service must be maintained and extended so that we may realize the high level of health we in America seek for all our people. That objective is a challenge to all those whose ideals are a career of service for the welfare of their fellow men.

Clinical Notes, Suggestions and New Instruments

ACTINOMYCOTIC GRANULOMA OF THE STOMACH

COMMANDER CLARENCE C. FULLER (MC), U.S.N.R.
AND
LIEUTENANT COMMANDER HAROLD WOOD (MC), U.S.N.R.

The stomach is a rare site for Actinomyces to gain a primary foothold. While the fungus is known to be of relatively low pathogenicity, once a port of entry is established the infection is very tenacious, and a granulomatous lesion results. Intestinal actinomycosis is well known. Two factors could be conducive to its relatively frequent occurrence in the appendix and the large intestine: stasis, and the common presence of mucosal imperfections. The stomach offers only one of these conditions commonly—mucosal defects. Hypothetically, the most favorable circumstances for the development of gastric actinomycosis might be the simultaneous presence of mucosal defects and viable Actinomyces in the stomach content or the production of mucosal defects by the ingestion of infected roughage.

The literature contains few case reports of primary gastric actinomycosis. Blain[1] presented briefly a review of the United States and European literature in 1933 and reported a case of primary actinomycosis of the stomach. He concluded that his was the first case of this type to be presented in the medical literature of this country. Quoting the review of the European literature by Nathan,[2] Blain stated that only 1 of the 6 cases reported there survived strict diagnostic scrutiny.

In the case reported by Blain[1] the symptoms, the roentgenologic studies and the gross and microscopic appearance of the gastric granuloma were strikingly similar to the case reported here; however, Blain's patient had metastatic lesions of the liver and died six months after gastrectomy.

REPORT OF CASE

History.—A man aged 48, a loom fixer, had been examined in a nearby hospital the week before admission. He had presented the symptoms of heartburn and occasional eructation and vomiting after eating. Those symptoms had been active over a period of five years, and their frequency had recently increased. A weight loss of 20 pounds (9 Kg.) occurred during the course of the complaints. The only positive physical finding was some spasm in the right upper quadrant. Roentgenologic examination of the gallbladder showed no evidence of disease. Gastrointestinal examination revealed that, radiologically, the stomach was normal in size and position. A constant deformity involved

From the Medical Service, U. S. Naval Hospital, Newport, R. I.
This article has been released for publication by the Division of Publications of the Bureau of Medicine and Surgery of the U. S. Navy. The opinions and views set forth in this article are those of the writers and are not to be considered as reflecting the policies of the Navy Department.

1. Blain, A. W.: Primary Actinomycosis of the Stomach: Report of Case, J. A. M. A. **100**: 168-169 (Jan. 21) 1933.
2. Nathan, H.: Primary Gastric Actinomycosis, Virchows Arch. f. path. Anat. **273**: 480-495, 1929.

the midportion of the lesser curvature. It appeared as a diverticulum, which could be the result of a penetrating ulcer or an old walled-off perforation. The stomach emptied in six hours, but barium persisted in the diverticulum. The intestine showed no abnormalities. The patient went home for a few days to consider operation.

Fig. 1.—Large deformity in pars media, apparently a deep penetrating ulcer on the lesser curvature.

At this hospital, to which he was admitted Jan. 16, 1942, the man gave a history of four attacks of pain beneath the left ribs during the past three years. Loss of appetite and vomiting two or three times daily lasted for a week. Burning pain under the left costal margin radiated to the left scapula and was relieved by vomiting. The vomitus was acid and yellow. Hematemesis and melena were absent. The bowels had been regular except for constipation during the attacks. The usual weight was 190 pounds (86 Kg.). Before the last attacks the weight was 172 pounds (78 Kg.). No treatment had previously been sought for these attacks.

The symptoms which initiated the present hospital studies consisted of heartburn followed by burning pain beneath the left costal margin two to three hours after meals and at about

Fig. 2.—Appearance one month later, showing two separate lesions, a penetrating ulcer of the lesser curvature, just below the cardiac opening, and a persistent prepyloric deformity, suggesting a second ulcer.

4 a. m. The pain was relieved by food and at times by eructation. For the first two or three days of the attack the pain was also relieved by vomiting.

Physical Examination.—Few abnormalities were noted. The patient was tall, appeared to be undernourished and weighed 144 pounds (65 Kg.). The tongue was coated. The blood pressure was 104/72. The liver edge was palpable two fingerbreadths below the right costal margin in the midclavicular line. No other pertinent findings were discovered.

Laboratory Examination.—Urinalysis was normal. A microcytic anemia of moderate degree was present. The blood nonprotein nitrogen was 56 mg. per hundred cubic centimeters on one occasion. The feces contained occult blood while the patient was on a modified Sippy diet. The blood Kahn test was negative.

Roentgenologic examinations were made by Dr. E. F. Merrill. On Feb. 19, 1942 fluoroscopic examination of the esophagus revealed no evidence of disease, but there was a very large deformity of the pars media of the stomach apparently as the result of a deep penetrating ulcer on the lesser curvature. This is best shown on a film which was made at the time of the fluoroscopic examination (fig. 1). About 3 ounces of the opaque mixture was still in the stomach at the end of six hours. On March 18 examination of the stomach showed fluoroscopic evidence of two separate lesions, mainly a penetrating ulcer of the lesser curvature just below the cardiac opening, which now showed up well on the film (figs. 2 and 3). A persistent deformity in the prepyloric region indicated the possibility of a second ulcerative lesion in that position. No gastric retention was noted, and no sign of duodenal or small bowel lesion was seen. On March 25 a third examination of the stomach with

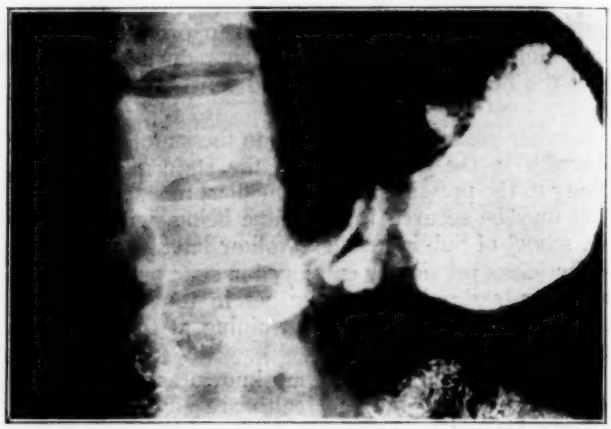


Fig. 3.—Different view from that presented in figure 2.

films made at the time of the fluoroscopic examination confirmed the finding of two ulcerating lesions in the stomach. They were well shown on films made at the time of the fluoroscopy.

Course.—During a prolonged preoperative course the patient was comfortable, except for occasional abdominal pain. Over a period of three and one-half months he gradually improved. March 30 his weight was 157 pounds (71 Kg.).

April 1 the patient was accepted by the surgical service. A partial gastrectomy was done on April 14. Tumor masses were found in the pars media on the lesser curvature and posteriorly, and high on the lesser curvature. There were adhesions to the left lobe of the liver. A sleeve resection of the stomach was done, including the tumor masses. A posterior gastrojejunostomy, with a short loop, completed the repair of the resection. A drain was left in for six days.

Gross Pathologic Examination.—The specimen consisted of the greater portion of a stomach, which included the pylorus, the pyloric sphincter and most of the lesser curvature. Situated in the posterior aspect of the lesser curvature, 7.5 cm. from the pyloric sphincter, was a disklike mass 5 cm. in diameter and up to 2.5 cm. thick. It produced an outward bulge on the curvature, where the attachment of the lesser omentum was scarred. Viewed from the interior of the stomach, the mass was displaced outward, to produce a broad crater-like surface defect with rounded, overhanging and invaginated margins. In profile it could simulate a double ulceration or a diverticulum. The mucosa which covered the lesion was thin but intact, and it was smooth and devoid of rugae. Sectioning revealed the mass to be gray and of dense fibrous consistency at the periphery, but the central portion was composed of a pale yellow necrotic zone

1.8 cm. in greatest diameter. This zone lay between the mucosa and the serosa, and it interrupted the continuity of the muscularis. The serosa was not penetrated by the necrotizing process.

An extra, narrow strip of the stomach also was submitted. Scarred fatty omentum was attached to the serosa. The stomach wall was intact, but within the fat were two small, pale brown lymph nodes.

The gross opinion was that inflammatory granuloma of the stomach existed, with a question of tuberculosis.

Microscopic Examination.—The mass in the stomach wall was composed of a granulomatous inflammatory lesion which contained ramifying abscesses filled with compact purulent exudate. In several sections from different blocks of the tissue there were large and small colonies of ray fungus in the purulent exudate. Dense granulation tissue and fibrous tissue surrounded the abscesses, and this tissue was densely infiltrated with a variety of leukocytes. In the granulation tissue eosinophils and multinucleated giant cells were prominent. The two lymph nodes were embedded in fibrous tissue. The lymphoid tissue was hyperplastic but did not show any active inflammatory reaction (fig. 4).

The pathologic diagnosis was actinomycosis of the stomach wall.

Postoperative Course.—There was slight drainage from the site of the drain, but the sinus was entirely healed at the end of one month. Smears from the drainage showed no actinomyces colonies. The patient was discharged May 26, 1942, six weeks after operation (fig. 5).

Follow-Up Examination.—On Sept. 8, 1943, fifteen months after discharge from the hospital, the patient returned for a check-up. He stated that he had been in perfect health since discharge and had gained 45 pounds (20.4 Kg.). After three months' convalescence he returned to work and had worked steadily. He had abstained from fried foods; he found that cucumbers disagreed with him, but he had had no other dietary trouble.

Fig. 4.—Section showing portion of abscess in stomach wall, which contains a large and a small actinomyces colony. The surrounding vascular scar tissue is infiltrated with a variety of leukocytes. This scar tissue accounts for the bulk of the inflammatory granuloma. Hematoxylin and eosin.

The patient appeared to be in good health. Urinalysis showed no abnormalities. The red blood corpuscle count was 4,650,000, the leukocyte count 11,400 and the differential count was normal (bands 1, segmented 74, lymphocytes 23, eosinophils 1, monocytes 1). Stereoscopic posteroanterior films of the chest showed no evidence of disease.

The patient is considered to be cured.

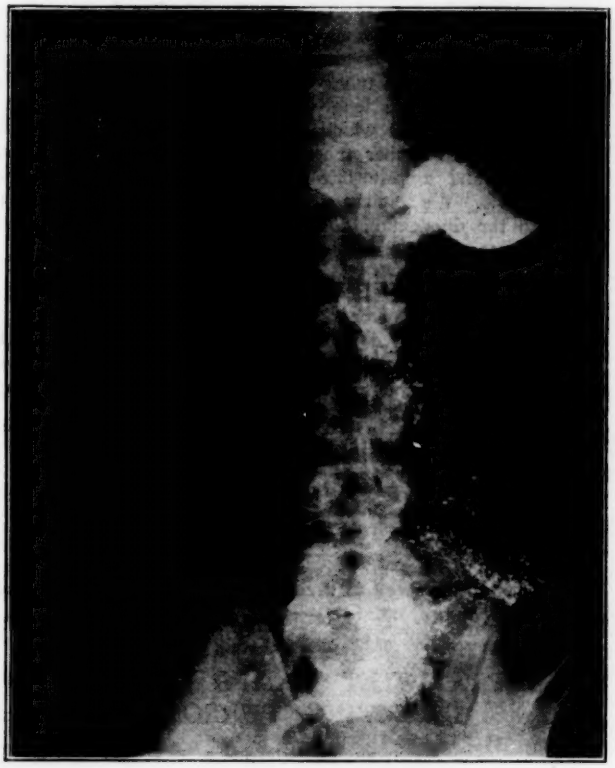


Fig. 5.—Appearance of stomach six weeks after resection, showing good function of gastrojejunostomy.

SUMMARY

Fifteen months after partial gastrectomy for actinomycosis of the stomach the patient was in good health and showed no evidence of extension of the disease. The lesion is considered to be primary in the stomach because of no evidence of pulmonary, upper alimentary tract or intestinal involvement. We believe that this case is probably the only one on record of cured primary gastric actinomycosis.

COMPLICATION ARISING FROM USE OF VITALLIUM TUBE FOR COMMON DUCT REPAIR

RALPH B. BETTMAN, M.D., AND WILLIAM J. TANNENBAUM, M.D.
CHICAGO

One of the difficulties we found in using rubber tubing for repairing defects in common duct injuries was that if the tubes did not pass in a short time they were apt to become plugged with a deposit from the bile. When vitallium tubes came into use we hoped that because of the properties of the metal and because of the shortness of the tube this would not occur. However, a few months ago we found it necessary to remove the first vitallium tube we had used because of biliary obstruction and were disappointed to note that the cause of the obstruction was a thick plug of deposit in the tube.

The history of the patient, a man aged 40, is that he had been operated on for gallstones about a year before we saw him. The surgeon when questioned did not think that he had injured the common duct but did say that the patient drained bile from the abdominal wound for many months after operation and that as the drainage ceased the patient became jaundiced. We operated on him after he had been jaundiced for at least six

From the Surgical Service, Michael Reese Hospital.

months; at the time he had a complete obstruction. At operation we easily picked up the dilated proximal part of the common duct and then—not so easily—the distal portion. The two seemed to be separated by about ½ inch of firm scar tissue. We reunited the common duct over an inch long vitallium tube. The patient's jaundice cleared gradually until he appeared normal and had a low icterus index. Then about six months after our operation he became jaundiced again and it was evident that he had another obstruction whether from a stone or from a plugging of the vitallium tube we did not know. We operated on him again, opened the common duct and removed the vitallium tube. The vitallium tube was firmly plugged for its entire length with a thick greenish deposit resembling the deposit which we had seen from time to time previously in the rubber tubes. The common duct otherwise was patent and a pale bile colored fluid gushed from the proximal end. We implanted the proximal end of the common duct into the duodenum, and the patient made an uneventful convalescence with rapid subsidence of the jaundice.

SUMMARY

A biliary obstruction occurred as the result of the plugging of a vitallium tube used in repair of an injured common duct. Judging from the literature this does not always occur, but the fact that it did occur in this case shows that plugging of a vitallium tube may be a possible objection to its use.

104 South Michigan Avenue.

Council on Physical Medicine

The Council on Physical Medicine has authorized publication of the following report. HOWARD A. CARTER, *Secretary.*

ULTRAVIOLET LAMPS FOR DISINFECTING PURPOSES

PRESENT STATUS

W. W. COBLENTZ, PH.D., D.Sc.
WASHINGTON, D. C.

The "Regulations of Acceptance of Ultraviolet Lamps for Disinfecting Purposes"[1] adopted and used by the Council on Physical Medicine have been in force a sufficient time to show that they serve a useful purpose in securing and maintaining a high standard of performance of ultraviolet germicidal lamps.

In my opinion the Council acted wisely at the outset by placing the responsibility on the lamp manufacturer and the distributor for the adequacy of the lamp installation for purposes of radiant disinfection of the air and for the adequacy of the protection from injury of the occupants of the space irradiated.

With the use of ultraviolet disinfecting lamps in their fixtures, as now made and attached to the side walls of schoolrooms, two types of avoidable injury have recently come to my attention. The first type of injury consisted of conjunctivitis and erythema, caused by the ultraviolet rays reflected by the lamp fixture horizontally across the schoolroom into the face of a person standing on the rostrum. Obviously, with a little forethought, this could have been avoided by installing the lamp fixture at a higher elevation or by adjusting the lower edge of the reflector so that the rays could not shine into the face of a person standing anywhere in the room.

The second type of injury reported to me consisted of burns by ultraviolet radiation reflected from the ceiling of a schoolroom on the bald head of the teacher as well as on that of the investigator who made the ultraviolet intensity measurements. In this case the lamp fixture was of the type made to project the ultraviolet rays vertically (thus impinging on the ceiling) as well as horizontally; and, since the ceiling was made of sound-proofing material that allegedly could not be painted with a material having a low reflectivity of ultraviolet radiation, the intensity at the level of the top of the head of a person standing erect was sufficient to cause erythema and burns. In both cases the intensity of ultraviolet radiation, at the location in the rooms where the injury was reported, was much higher than the maximum permissible value specified by the Council. It is gratifying to know that in both of these instances remedial action was taken. Obviously if the lamps had been properly installed and measurements of intensities of diffusely scattered ultraviolet radiation had been made before occupancy of the room, these injuries would not have happened.

In addition to the aforementioned types of injury is the slow photochemical action caused by low intensity ultraviolet radiation on the skin, producing desquamation of the epidermis of some of the nurses and infants, reported in the Council's "Acceptance."[1] This was remedied by painting the walls and ceiling with a decorative, light blue paint that absorbed these rays. Incidentally it is relevant to note that many paint vehicles (also drapes, wall paper and the like) will be burned brown by ultraviolet rays.

The Council's specification of maximum acceptable intensities of ultraviolet radiation incident on an occupant of a room is based on my radiometric measurements in the aforementioned nursery after it was painted. Of course there has been a wail that the Council's maximum values of acceptable intensities are not "sacred." However, from my contacts with people in nurseries equipped with disinfecting lamps I am fully convinced that the Council's specification of an intensity of ultraviolet radiation of wavelength 2,537 angstroms not exceeding 0.5 microwatt per square centimeter (0.5 μW/cm.^{2}) incident on an occupant for seven hours or less, and not exceeding 0.1 microwatt per square centimeter incident for twenty-four hours a day, is a fair and reasonable requirement that should remain unchanged. This is substantiated by the aforementioned measurements of intensities of ultraviolet reflected from the schoolroom ceiling, amounting to only about four times the Council's specified value (0.5 microwatt per square centimeter) for an occupancy of not longer than seven hours. Nevertheless erythema was caused, showing the low margin of safety that prevailed before the lamp fixture was modified.

The Council's requirements for acceptability of ultraviolet disinfecting lamps (that the concentration of ozone near the occupants of the room shall not exceed one part in ten million) should continue in force.

A recent improvement in germicidal lamps consists in the use of a glass that is highly transparent to the powerful emission line at 2,537 angstroms and is practically opaque to wavelengths shorter than about 2,300 angstroms that generate ozone. This improvement in lamp construction is a tacit recognition of the importance of preventing the generation of ozone by germicidal lamps. Since certain of these lamps do not generate ozone, or at least generate less ozone than other lamps, this could be regarded as an advance in sanitary ventilation.

About three decades ago an elaborate attempt was made to disinfect water on a large scale by ultraviolet

1. J. A. M. A. **122:** 503 (June 19) 1943 (reprinted with revisions).

lamps, using hot quartz mercury arc lamps. The presence of suspended matter made ultraviolet radiation an uncertain method of sterilizing water. With the advent of the low vapor pressure, mercury arc germicidal lamps the proposal to sterilize water, particularly individual water supplies (canteens), has been again revived. Laboratory tests show that while cysts of Endameba histolytica can be killed by radiation from a low pressure mercury arc (wavelength 2,537 angstroms) lamp, since the effectiveness of such radiation depends on the depth and turbidity of the water, there is no evidence of the practicability of using this method as an adjunct in the sterilization of drinking water. Hence, the point of view expressed in the Council's "Acceptance" [1] regarding the sterilization of solids and of liquids (water) does not require modification.

The outstanding perennial problem is the prevention of classroom air borne spreading of childhood contagions (chickenpox, measles, mumps) and colds by the killing action of ultraviolet radiation, using the newly developed germicidal lamps. The uncertainty of the effectiveness of ultraviolet radiation in preventing colds seems about as great at this date as it was some two decades ago when irradiation of the body with "hot quartz" mercury arc lamps was tried.

There are several reasons for this uncertainty: (1) "the futility of trying to stop colds among school children by irradiating only their classrooms," [2] because their surroundings cannot be controlled while they are not in the classroom, and (2) the total intensity of germicidal radiation emitted by each lamp in its fixture, and the total number of lamp units used must exceed a minimum value in order to be effective in reducing cross infection, as noted in the Council's "Acceptance." [1] This is shown conclusively in the studies carried out at the U. S. Naval Training Center, Sampson, N. Y., where observations were made on large groups of recruits housed in barracks that were (1) irradiated with high intensity germicidal lamps, (2) alternate barracks having low intensity germicidal lamps and (3) barracks used as controls in which there were no germicidal lamps.

The results of this investigation,[3] which extended over a period of six months (December to May) are impressive and instructive in showing that the incidence of respiratory illness in the barracks irradiated with low intensity ultraviolet lamps followed the same undulations that occurred in the adjacent control barracks, whereas in the barracks irradiated with a high intensity there was a definite reduction in the incidence of respiratory illness—a reduction estimated at 25 per cent for the entire period of observation of respiratory illness in the high intensity irradiated group as compared with the control group, "and not due to chance." Hence, while ultraviolet radiant disinfection of air can be substituted for actual air displacement in reducing cross infection in chickenpox, measles and mumps,[4] and with less certainty in reducing the incidence of colds, there is no evidence that will justify high pressure sales promotion of ultraviolet disinfecting lamps as a cureall or sureshot preventive of respiratory illness. Disinfection by ultraviolet radiation can serve a useful purpose, but it has its limitations. In this connection it is a satisfaction to record that at least one manufacturer is issuing to its salesmen and distributors a printed guide setting forth factual information regarding ultraviolet disinfecting lamps and some of their shortcomings. Whether this is for self protection (because an "employer need not ask an employee to cheat for him," as the vice president of one large lamp manufacturing concern once remarked to me, years ago) or for altruistic reasons, the booklet should serve a useful purpose in guiding overenthusiastic salesmen as well as the consumer.

2. Wells, W. F.: Measurement of Air Borne Infection by the Disinfection of Air, Am. J. M. Sc. **209:** 177-180, 1945. Wells, W. F.; Wells, Mildred W., and Wilder, T. S.: Am. J. Hyg. **35:** 97-121, 1942.

3. Wheeler, S. M.; Ingraham, H. S.; Hollaender, A.; Gershon-Cohen, J., and Brown, E. W.: Ultraviolet Light Control of Air Borne Infections in a Naval Training Center, Am. J. Pub. Health **35:** 457-468, 1945.

4. Wells, Mildred Weeks: Ventilation in the Spread of Chickenpox and Measles Within School Rooms, J. A. M. A. **129:** 197-200 (Sept. 15) 1945.

Council on Foods and Nutrition

ACCEPTED FOODS

The following additional foods have been accepted as conforming to the Rules of the Council on Foods and Nutrition of the American Medical Association for admission to Accepted Foods.

GEORGE K. ANDERSON, M.D., *Secretary.*

PREPARATIONS USED IN THE FEEDING OF INFANTS (*See* Accepted Foods, 1939, p. 156)

Campbell Soup Company, Camden, N. J.

CAMPBELL'S STRAINED BEEF BABY SOUP, contains beef broth, beef, tomatoes, carrots, sweet potatoes, white potatoes, egg noodles, onions, celery and salt.

Analysis (submitted by manufacturer).—Total solids 13.7%, protein 3.91%, fat 0.9%, carbohydrate by difference 7.6%, crude fiber 0.22%, calcium 0.046%, phosphorus 0.068%, iron 0.40 mg. per hundred grams, copper 0.17 mg. per hundred grams, manganese 0.053 mg. per hundred grams.

Calories.—15 per ounce.

Vitamins.—Vitamin A	1,693	I. U. per hundred grams
Thiamine	0.037	mg. per hundred grams
Riboflavin	0.072	mg. per hundred grams
Ascorbic acid	3.9	mg. per hundred grams
Niacin	1.29	mg. per hundred grams

Campbell Soup Company, Camden, N. J.

CAMPBELL'S STRAINED CHICKEN BABY SOUP, contains chicken stock, carrots, chicken, semolina, sweet potatoes, celery, onion, parsley and salt.

Analysis (submitted by manufacturer).—Total solids 11.8%, protein 2.63%, fat 1.5%, carbohydrate by difference 6.4%, crude fiber 0.15%, calcium 0.026%, phosphorus 0.042%, iron 0.22 mg. per hundred grams, copper 0.24 mg. per hundred grams, manganese 0.075 mg. per hundred grams.

Calories.—14 per ounce.

Vitamins.—Vitamin A	1,766	I. U. per hundred grams
Thiamine	0.018	mg. per hundred grams
Riboflavin	0.040	mg. per hundred grams
Ascorbic acid	1.1	mg. per hundred grams
Niacin	0.77	mg. per hundred grams

Campbell Soup Company, Camden, N. J.

CAMPBELL'S STRAINED LAMB BABY SOUP, contains lamb stock, sweet potatoes, white potatoes, carrots, [illegible], barley, onions, celery and salt.

Analysis (submitted by manufacturer).—Total solids 13.9%, protein 3.09%, fat 2.1%, carbohydrate by difference 7.2%, crude fiber 0.30%, calcium 0.046%, phosphorus 0.068%, iron 0.35 mg. per hundred grams, copper 0.12 mg. per hundred grams, manganese 0.054 mg. per hundred grams.

Calories.—17 per ounce.

Vitamins.—Vitamin A	1,130	I. U. per hundred grams
Thiamine	0.036	mg. per hundred grams
Riboflavin	0.068	mg. per hundred grams
Ascorbic acid	2.7	mg. per hundred grams
Niacin	1.22	mg. per hundred grams

Campbell Soup Company, Camden, N. J.

CAMPBELL'S STRAINED LIVER BABY SOUP, contains liver broth, tomatoes, carrots, white potatoes, sweet potatoes, beef liver, oatmeal, peas, onions, celery and salt.

Analysis (submitted by manufacturer).—Total solids 13.3%, protein 3.42%, fat 0.9%, carbohydrate by difference 7.5%, crude fiber 0.29%, calcium 0.013%, phosphorus 0.065%, iron 0.72 mg. per hundred grams, copper 0.35 mg. per hundred grams, manganese 0.173 mg. per hundred grams.

Calories.—15 per ounce.

Vitamins.—Vitamin A	7,000	I. U. per hundred grams
Thiamine	0.080	mg. per hundred grams
Riboflavin	0.62	mg. per hundred grams
Ascorbic acid	7.3	mg. per hundred grams
Niacin	1.54	mg. per hundred grams

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

535 North Dearborn Street - - Chicago 10, Ill.

Cable Address - - - - "Medic, Chicago"

Subscription price - - - - - Eight dollars per annum in advance

Please send in promptly notice of change of address, giving both old and new; always state whether the change is temporary or permanent. Such notice should mention all journals received from this office. Important information regarding contributions will be found on second advertising page following reading matter.

SATURDAY, DECEMBER 22, 1945

THE TERM "DOCTOR" IN AMERICA

Dr. Edward M. Repp of Philadelphia has a question for the medical Emily Post. His daily work requires occasional conferences with his druggist and also with the head of a laboratory who examines specimens. Should he address these associates as doctor or mister? In the neighborhood where he resides are also an osteopath, a chiropractor and a chiropodist. These too he meets occasionally while en route on his medical tasks; he never knows whether to say "doctor" or something different. A similar question disturbed Hugh J. McDonald,[1] who discussed the subject not long ago in the *Journal of Higher Education.* A survey of the graduate degrees awarded by the colleges and schools of New York State during 1937 reveals thirteen types of doctors' degrees awarded during the year. The term "doctor," originally the equivalent of teacher or instructor, according to McDonald, seems to have originated among the Romans, who applied it to any one who delivered public lectures or addresses on philosophic subjects. Later in the twelfth century the term was a title of honor borne by men of learning. It was first made an academic title at the University of Bologna in Italy, which received from the emperor the right of appointing *doctores legum* (doctors of laws). The University of Paris followed in 1145. Then the popes granted the universities the right of appointing *doctores canonum et decretalium* (teachers of the canon law). Eventually the study of civil law was combined with canon law, and the title was changed to *doctor utriusque juris* (teacher of both laws). The faculties of theology and medicine followed in conferring the title, but it had been in use for two and a half centuries in other fields before it was conferred in medicine.

The degree of doctor is now conferred in so many areas of learning that the result is confusion. McDonald feels that the conferring of the doctoral degree is in need of a thorough house cleaning. The degree of doctor of philosophy (Ph.D.) is granted for three years of full time study and examination and the preparation of a thesis following the bachelor's degree. The degree of doctor of science (D. Sc.) is granted for an identical program when the major part of the work is in science. Many times in education, history, literature, economics, sociology and natural sciences the Ph.D. seems to be granted for meeting a standard of mediocrity. Some of the titles of theses have become the butt of humorous remarks, a typical example being a thesis on "The Length of Sentences in Spenser." The conclusion of this important thesis, which was three hundred pages long, was that the sentences in Spenser were of three types—long, short and those which could not accurately be described as either "long" or "short."

As McDonald points out, in the field of ill health the assortment of doctorates now includes the degree of naprapathy, which can be had in ninety days without any entrance requirements; doctor of chiropractic in from one to four years, depending on the school, with the minimum entrance requirement usually just an elementary school education; doctor of surgical chiropody in from eighteen months to three years, with an entrance requirement like that of chiropractic; doctor of optometry three to four years after high school graduation; doctor of osteopathy a minimum of four years, with one year of college work as prerequisite; doctor of public health, with as yet little standardization and, incidentally, available to graduates in bacteriology or related fields after three years' study. McDonald believes that some of these people have about as much legitimate claim to a doctor's degree as would a hotel dishwasher to a D.D.W. Then there are also doctors of medicine, doctors of dental medicine, doctors of veterinary medicine and doctors of dental surgery with better standardized requirements.

The confusion among degrees granted in the field of law is apparent when one remembers that lawyers can get the degree of Bachelor of Laws (LL.B.), Doctor of Jurisprudence (J.D.), Master of Laws (LL.M.) and Doctor of the Science of Jurisprudence (S.J.D.). Each year about a thousand honorary degrees are awarded with Doctors of Laws, of Humane Letters, of Science and of Engineering. The spurious degrees in the field of theology are equally a problem.

Educational authorities might well consider the desirability of some standardization in this area so that the degree of doctor, regardless of the field of learning in which it is applied, will have real significance. Furthermore the public should be able to determine from a title the actual qualifications of the man who adorns himself with it. Finally, the economists who devote themselves to propaganda for revolutionizing medical care persistently trade on their doctor of philosophy degrees and thus perpetrate a fraud on the public, who take it for granted that these "doctors" are physicians.

1. McDonald, Hugh J.: The Doctorate in America, J. Higher Education **14**: 189 (April) 1943.

CANCER AND CALORIC RESTRICTION

The role of nutrition in cancer has received much attention, since both the developing cancer cell and the growing tumor must obtain sustenance from the metabolic pool of the body. Tannenbaum [1] demonstrated that underfeeding—restriction of the ad libitum intake by approximately one third—invariably caused a significant reduction in the incidence of tumors in mice. This inhibitory effect on tumor formation was noted with all four types of tumors studied—spontaneous mammary carcinoma, spontaneous lung tumor, induced carcinoma of the skin and induced sarcoma—suggesting that many types of tumors respond in a similar manner. Furthermore, the tumors of the underfed groups appeared, on the average, later than those of the full-fed groups. While the reduction in food intake to about two thirds of the normal intake seems drastic, the underfed mice appeared healthy and in general lived longer than the controls.

Tannenbaum suggested that the inhibition of tumor formation through underfeeding (all components and caloric content being reduced proportionately) was due mainly to restriction of calories rather than to restriction of some essential component of the diet. In subsequent investigation [2] only the carbohydrate content of the diet was restricted, while the protein, minerals and vitamins were maintained constant (caloric restriction per se) and yet the nature and extent of inhibition of tumor formation was similar to that observed in the earlier investigations. Visscher and his associates,[3] Saxton, Boon and Furth,[4] White and his associates [5] and Rusch, Kline and Baumann [6] confirmed these observations or extended them to other tumors and to leukemia. Thus there seems to be little question that a calory restricted diet both reduces the incidence of tumors and delays their time of appearance. At least this statement is valid for all tumors so far studied.

Apparently it is not necessary to restrict the caloric intake greatly to inhibit tumor formation. On the basis of experiments in which the calory restricted diets ranged from approximately 60 per cent to 90 per cent of the ad libitum intake, Tannenbaum [7] concludes that any degree of caloric restriction may exert some inhibitory effect on the formation of tumors; however, the lower the caloric intake, the greater the inhibition. Evidence is also presented [8] indicating that the inhibition is produced principally during the period in which tumors actually appear (developmental stage) rather than in the period of initiation (preparatory stage); that is, the inhibitory effect is obtained even when the caloric restriction is instituted just before tumors are expected to appear.

All these studies relate to the origin or genesis of tumors and not to the growth of a tumor once it has appeared. Although nutrition may be of some value in the prevention of tumors, the evidence suggests that there is little likelihood that it is of practical help in controlling the growth of tumors.

This dependence of the genesis of tumors in mice on the caloric value of the diet would obviously suggest inquiry into its applicability in human cancer. Tannenbaum's review [9] of the available insurance statistics suggests that persons of average weight or less are not as likely to develop cancer as are those who are overweight. Obesity and the consumption of more food than the body needs for its current activity appear to be contraindicated.

Other nutritional factors undoubtedly have some effect on the formation of tumors. In the present state of our knowledge, however, caloric intake appears to be the best defined nutritional factor in the formation of tumors. Probably avoidance of overweight, besides being of value prophylactically in diabetes, heart disease and arthritis, may aid in the prevention of many types of cancer occurring in man or, at least, delay the onset. The study of the relationship of nutrition to the origin and growth of tumors appears to be a fruitful and possibly practical field of investigation.

1. Tannenbaum, Albert: The Initiation and Growth of Tumors: Introduction. I. Effects of Underfeeding, Am. J. Cancer **38**: 335 (March) 1940.
2. Tannenbaum, Albert: The Genesis and Growth of Tumors: II. Effects of Caloric Restriction per Se, Cancer Research **2**: 460 (July) 1942.
3. Visscher, M. B.; Ball, Zelda B.; Barnes, R. H., and Sivertsen, Ivar: The Influence of Caloric Restriction on the Incidence of Spontaneous Mammary Carcinoma in Mice, Surgery **11**: 48 (Jan.) 1942.
4. Saxton, J. A. Jr.; Boon, M. C., and Furth, J.: Observations on the Inhibition of Development of Spontaneous Leukemia in Mice by Underfeeding, Cancer Research **4**: 401 (July) 1944.
5. White, Florence R.; White, Julius; Mider, G. B.; Kelly, Margaret G., and Heston, W. E.: Effect of Caloric Restriction on Mammary-Tumor Formation in Strain C3H Mice and on the Response of Strain DBA to Painting with Methylcholanthrene, J. Nat. Cancer Institute **5**: 43 (Aug.) 1944.
6. Rusch, H. P.; Kline, B. E., and Baumann, C. A.: The Influence of Caloric Restriction and of Dietary Fat on Tumor Formation with Ultraviolet Radiation, Cancer Research **5**: 431 (July) 1945.
7. Tannenbaum, Albert: The Dependence of Tumor Formation on the Degree of Caloric Restriction, Cancer Research, **5**: 609 (Nov.) 1945; The Dependence of Tumor Formation on the Composition of the Calory Restricted Diet as Well as on the Degree of Restriction, ibid., p. 616.
8. Tannenbaum, Albert: The Dependence of the Genesis of Induced Skin Tumors on the Caloric Intake During Different Stages of Carcinogenesis, Cancer Research **4**: 673 (Nov.) 1944.
9. Tannenbaum, Albert: Relationship of Body Weight to Cancer Incidence, Arch. Path. **30**: 509 (Aug.) 1940.

DECELERATION IN MEDICAL EDUCATION

Elsewhere in this issue is a directive of the Selective Service System pertaining to deceleration of medical education. Part 2 of this directive, providing that medical students shall not be required to pursue an accelerated course of study, may require some interpretation for the medical schools and the local boards.

A nonrecurring special study period of about three or four months' duration, in addition to a normal vacation period of three months, will not constitute a departure from the provisions of the directive, provided the medical school assumes responsibility for the work of the students. The school must be able to certify to the Selective Service System that the students engaged in this special study are registered in the medical school and are advancing toward the professional objective of an understanding of medicine. The

work may or may not be done in residence and may include one or more of the following supervised assignments, which must be in the fields of clinical or basic medical sciences: reviews of medical literature, preparation of theses, laboratory or research work, elective medical courses, or informal clerkships in hospitals acceptable to the medical school. Students who have satisfactorily just completed an academic year in the medical school should first be promoted to the next medical class prior to this special study period. Such tuition charges as the school may wish to assess for the special study period can be determined by each school for itself.

The directive of the Selective Service System deserves and will receive the highest commendation by medical schools and medical educators, who will assume the responsibilities involved with seriousness and good faith. Since there is now practically no doubt that the medical A. S. T. P. will be discontinued by the end of the current academic year (along the same lines as the Navy V-12 program), this ruling means that medical schools can now (1) decelerate, if they so desire, with each academic session commencing in the autumn, (2) adjust their calendars to the new internship schedules of the "reconverted 9-9-9 program" (see THE JOURNAL, November 24, p. 878) pointing toward annual internship appointments in June and (3) free their clinical facilities for a period of three to six months next spring and summer to provide educational opportunities —perhaps externships—for returning medical officers desiring such training. Any medical school planning special courses for physician veterans should notify the Council on Medical Education and Hospitals at once, so that they can be included in a supplement to the "Postgraduate Continuation Courses for Veteran and Civilian Physicians" published in THE JOURNAL December 8. Reprints of these lists are widely distributed in response to a large demand.

Current Comment

BENJAMIN RUSH, M.D. (1745-1813)

The two hundredth anniversary of the birth of Benjamin Rush [1] occurs Dec. 24, 1945. He was a signer of the Declaration of Independence, a public spirited citizen and a distinguished physician. Benjamin Rush was appointed the first professor of chemistry (1768) at the first medical school (of the University of Pennsylvania) in the English Colonies on the American continent at the early age of 23. At the University of Pennsylvania he became associated on the faculty with John Morgan [2] (1735-1789), the first professor of medicine (1765) in the first medical school in our country, William Shippen Jr.[2] (1736-1808), Adam Kuhn, professor of materia medica and botany, and Thomas Bond (1712-1784), founder with Benjamin Franklin and physician of the Pennsylvania Hospital (1751), professor of clinical medicine, the first professor with this title in America. Benjamin Rush, the "American Sydenham" (Lettsom) was, according to Welch, "the greatest historical figure in American medicine." He described the Philadelphia epidemic (1793) of yellow fever most accurately and noted that mosquitoes were particularly numerous in times of epidemics. He described dengue independently in 1780, although Bylon gave the original description in 1779. He advised the extraction of decayed teeth for the relief of dyspepsia, rheumatism of the hip joint and epilepsy. These interesting case reports were published in his "Medical Inquiries and Observations" [3] under the title "An Account of the Cure of Several Diseases By the Extraction of Decayed Teeth." Benjamin Rush received his medical degree at Edinburgh. He was one of the founders of the Philadelphia College of Physicians in 1787. He founded the Philadelphia Dispensary for the poor in 1786. He advocated preventive medicine and introduced a code of medical ethics, antedating Thomas Percival of Manchester, England, considered the "father of a system of medical ethics."

1. Rush was born Dec. 24, 1745, at Byberry, near Philadelphia, and died April 19, 1813.

2. John Morgan and William Shippen Jr. both studied medicine at Edinburgh under William Cullen.

3. Rush, Benjamin: Medical Inquiries and Observations, ed. 3, Philadelphia, Prichard and Hall, 1809 (The Cure of Diseases by the Extraction of Teeth), vol. 1, pp. 349-353. In October 1801 Rush attended Miss A. C., who suffered from rheumatism of the hip. In November he directed the decayed teeth to be extracted, and the rheumatism of the hip was cured! He emphasized the connection between the extraction of decayed teeth and the cure of general diseases. Extraction of the decayed tooth in the case of Mrs. J. R. cured her of her dyspepsia. He refers to prior work by Drs. Darwin, Petit and Siebold.

NEW POWDER FOR FUNGOUS INFECTIONS

Fungous infections have been among the more stubborn medical problems in the Pacific war, accounting for as high as three fourths of all sickbay calls at some tropical bases. Some standard remedies useful at home were too irritating in the steaming tropical islands. A new remedy for the condition was tested by Commanders Henry C. Shaw, Marion B. Sulzberger and Abram Kanof, U.S.N.R. The active ingredients of the substance in powder form are undecylenic acid (2 per cent), a fatty acid found in sweat, and its zinc salt, zinc undecylenate (20 per cent), which are mixed with ordinary talc. The remedy can be used in the form of an ointment which contains 5 per cent undecylenic acid and 18 per cent zinc undecylenate in a carbowax base with water, propylene glycol and triethanolamine. The new drug was used on men at the Amphibious Training Base, Fort Pierce, living as they would during an assault, wearing combat clothing, working in the water and under the hot sun. More than 1,800 men employed the undecylenic preparation, more than 2,000 used other preparations, while more than 1,600 used none at all in order to compare results. Fungous infection of the feet developed in 28 per cent of trainees who did not use prevention. Regular dusting with the new powder cut infections to 4 per cent. Under the same conditions 15 per cent developed infection while using powder containing boric and salicylic acids. Groin infections were cut from 10.3 to 0.7 per cent by the powder.

MEDICINE AND THE WAR

SELECTIVE SERVICE

DEFERMENT AND DECELERATION IN MEDICAL EDUCATION

The following State Directive Advise No. 322 was issued December 3 from National Headquarters of the Selective Service System by Lewis B. Hershey.

1. Local Board Memorandum No. 115 provides for consideration for the deferment of registrants who are pursuing a full time course of study in a recognized school of medicine, dentistry, veterinary medicine or osteopathy until their graduation if they have completed a satisfactory preprofessional course prior to their entrance, provided that a student of veterinary medicine should not be considered for occupational deferment if he commenced his course in veterinary medicine on or after March 15, 1945.

2. Students who are entitled to consideration for deferment under such provisions shall not be required to pursue an accelerated course of study in a recognized school of medicine, dentistry, veterinary medicine or osteopathy, provided that the course of study includes at least nine months of study and not more than three months of vacation in each calendar year.

3. Local boards will consider such students for deferment during the usual three month vacation period if it is certified by a responsible official of the school that the students are, in fact, bona fide students and are satisfactorily pursuing a full time course of study.

ARMY

ARMY TO RELEASE TWENTY-THREE HOSPITALS

Major Gen. Norman T. Kirk, Surgeon General of the Army, recently announced that the Army will release twenty-three hospitals out of its wartime peak of sixty-five by Jan. 1, 1946. These hospitals will be offered to the Veterans Administration or to the former owners of these hospitals. Additional hospitals will be released after the first of the year.

The peak load of hospitals in the United States, reached at the end of June 1945, was 318,000 and has been dropping slowly ever since, despite the influx of men from overseas theaters. The Medical Department estimated that by Jan. 1, 1946 this total will have declined to about 220,000 patients and that by June 1947 there will be only 70,000 men remaining in army hospitals.

The hospitals to be released and the schedule are as follows:

Ashburn General Hospital, McKinney, Texas, December 12; Barnes General Hospital, Vancouver, Wash., December 5; Battey General Hospital, Rome, Ga., December 15; Baxter General Hospital, Spokane, Wash., November 10; Darnall General Hospital, Danville, Ky., December 15; DeWitt General Hospital, Auburn, Calif., December 31; Finney General Hospital, Thomasville, Ga., December 15; Camp Forrest Hospital Center (POW), Camp Forrest, Tenn., December 15; Foster General Hospital, Jackson, Miss., December 15; Glennan General Hospital, Okmulgee, Okla., November 21; Hammond General Hospital, Modesto, Calif., December 21; Harmon General Hospital, Longview, Texas, December 5; Hoff General Hospital, Santa Barbara, Calif., November 10; La Garde General Hospital, New Orleans, November 28; McCaw General Hospital, Walla Walla, Wash., November 25; Camp Pickett General Hospital, Camp Pickett, Va., December 1; Stark General Hospital, Charleston, S. C., October 15; Thayer General Hospital, Nashville, Tenn., December 31; Torney General Hospital, Palm Springs, Calif., November 20; Winter General Hospital, Topeka, Kan., December 1; Camp Butner Convalescent Hospital, Camp Butner, North Carolina, December 15; Camp Pickett Convalescent Hospital, Camp Pickett, Va., October 27; Wakeman Convalescent Hospital, Camp Atterbury, Ind., December 15.

DEDICATE BRONZE PLAQUE OF DR. WALTER HUGHSON

A bronze plaque in memory of the late Dr. Walter Hughson was recently dedicated and established at Deshon General Hospital, Butler, Pa. Dr. Hughson, who for ten years had served as director of the Otological Research Laboratories at Abington Memorial Hospital, Abington, Pa., and associate professor of otology in the Medical School and Graduate School of Medicine at the University of Pennsylvania, died in September 1944. As early as 1942 Dr. Hughson had formulated his concept of rehabilitation of war casualties and had done a great deal of work in the fitting of hearing aids on an objective basis.

The plaque occupies a place of honor in the Aural Rehabilitation Clinic at Deshon General Hospital and was presented to the hospital through the courtesy of the American Rolling Mill Company of Butler, Pa., and of the Nail City Bronze Company, Wheeling, W. Va.

ARMY EXCEEDS QUOTA ON RELEASE OF DOCTORS

The War Department recently announced that the Army's quota of 13,000 doctors to be released to civilian life by December 31 has been exceeded six weeks in advance of the deadline. The total number of doctors who have been separated from the service since VE day reached 13,320 for the week ended November 16. For the same week the total for nurses who have been released came to 20,222 and the dentists' total was 2,460. From a peak strength of over 45,000, all but 11,000 will be out of the service by June 1, 1946, it was stated.

NEW CHIEF NURSE AT GARDINER GENERAL HOSPITAL

Major Floramund F. Difford, A. N. C., was recently named chief nurse at Gardiner General Hospital, Chicago, to succeed Major Nellie M. Denison, who is retiring after twenty-seven years' service with the Army Nurse Corps. A member of the Army Nurse Corps since 1936, Major Difford was serving in the Philippines at the time of the Japanese invasion. After the fall of Manila she and a number of patients and doctors were smuggled out to Australia, where she stayed until November 1944. Since that time she has been stationed in the United States.

COLONEL ESMOND R. LONG LENT TO VETERANS ADMINISTRATION

Col. Esmond R. Long, chief consultant on tuberculosis for the Surgeon General of the Army, was recently lent to the Veterans Administration on request of Major Gen. Paul R. Hawley, acting surgeon general, to assist in establishing a superior standard of care for tuberculous veterans. Colonel Long, who was commissioned in 1942, recently returned from Germany, where he was attached to the public health branch of the Office of Military Government.

REGULAR MEDICAL OFFICERS TAKE REFRESHER COURSES

The Office of the Surgeon General recently announced the Army's new plan to give professional training to regular medical officers who have been on administrative assignments. One hundred doctors already have been ordered to training. Twenty-one of the group are specializing in internal medicine, 33 in general surgery. The others are studying radiology, ear, nose and throat, anesthesiology, neuropsychiatry, urology, pathology, orthopedics, public health and obstetrics and gynecology.

ARMY AWARDS AND COMMENDATIONS

Major Charles Leasum

The Bronze Star was recently awarded to Major Charles Leasum, formerly of Sturgeon Bay, Wis.. The citation accompanying the award called attention to the fact that Major Leasum, "while a prisoner of war in Japanese Prison Camp No. 1, Cabanatuan, Philippine Islands, from October 1944 to January 1945, performed outstanding services as chief of dysentery area and ward surgeon in a general hospital. With improvised, makeshift equipment and depleted medical supplies, he labored against great odds and on a starvation diet. Faced with the problems of malnutrition, deleterious housing and sanitary conditions and the constant danger of food contamination by insects and vermin, he succeeded in controlling epidemics which threatened the entire camp. Major Leasum's devotion to duty, his unfailing courage and initiative, were important factors in maintaining the will to survive among his fellow prisoners of war." Dr. Leasum graduated from Jefferson Medical College of Philadelphia in 1918 and entered the service Dec. 27, 1940.

Major William F. Gassaway

Major William F. Gassaway, formerly of Ellicott City, Md., was recently awarded the Bronze Star for meritorious service from Dec. 25, 1944 to March 19, 1945 near Wingen, Philippsbourg, Behren, Styring, Wendel and Forbach, France. Said the citation, "Under your tireless leadership both the regimental and battalion aid stations functioned in a superior manner throughout this entire period of action against the enemy. In addition, your efforts to prevent and cure trench foot kept the loss of personnel from the cause at a minimum. Your unfailing supervision and your ability in commanding the medical detachment under your control to fulfil the most difficult assignments were an invaluable contribution to the success of the 274th Infantry Regiment." Dr. Gassaway graduated from the University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, in 1940 and entered the service Aug. 1, 1941.

Major Gerald J. Friedman

Major Gerald J. Friedman, formerly of New York, was recently commended by Lieut. Col. Edward G. Billings, medical consultant in the Office of the Surgeon, Headquarters, South Pacific Base Command, APO 502. The commendation read, in part, "It is indeed a pleasure to commend you for the superior way in which you assisted this office between Feb. 7 and March 1, 1945 in the compilation of data relevant to the incidence, forms and epidemiology of diphtheria infections in this command. You applied your talents diligently and showed great aptitude for sensing the clinical importance of the information at hand. This work which you have done will aid very materially this headquarters in making known its experiences with this infection." Dr. Friedman graduated from the New York University College of Medicine, New York, in 1937 and entered the service June 9, 1941.

Captain James William Urie

The Bronze Star was recently awarded to Capt. James William Urie, formerly of Elmhurst, Del., for heroic achievement on Mount Mapatad, Luzon. According to the citation, Captain Urie received word that five seriously wounded men on the line needed medical attention at once. He moved out immediately with a party of five, over terrain so severe that they were unable to reach the men the same evening. Dr. Urie graduated from Hahnemann Medical Clollege and Hospital of Philadelphia in 1929 and entered the service June 19, 1942.

Lieutenant Colonel Robert O. Y. Warren

A special commendation was recently awarded to Lieut. Col. Robert O. Y. Warren, formerly of Wilmington, Del. According to the citation, "When an evacuation hospital area was flooded by an overflowing river the night of Nov. 2, 1944, Lieutenant Colonel Warren, chief of the medical service of the unit, assumed charge of all medical wards and directed the evacuation of all patients without loss or serious disability to the patients. He then efficiently supervised the continuation of treatments and medication in effect before the flood. His exemplary leadership, skill and loyalty to duty manifest the fine tradition of the U. S. Army Medical Corps." Dr. Warren graduated from Johns Hopkins University School of Medicine, Baltimore, in 1929 and entered the service July 12, 1942.

Lieutenant Colonel Thomas H. Tomlinson Jr.

The Legion of Merit was recently awarded to Lieut. Col. Thomas H. Tomlinson Jr., formerly of Thomasville, N. C., who, according to the citation, "developed and closely supervised the theater hospitalization program and participated to a great extent in the development of all other theater medical plans. Through his untiring efforts and organizational ability he has successfully coordinated the medical activities in this theater for a period of over thirty-three months." Dr. Tomlinson graduated from the University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, in 1932 and was commissioned in the United States Public Health Service in 1934.

Major Robert C. Haubrich

Major Robert C. Haubrich, formerly of Pataskala, Ohio, was recently awarded the Bronze Star for his services at Okinawa. A flight surgeon with the 7th Air Force, he accompanied combat airmen on sorties against the Japanese and studied their reactions and equipment in combat in order to provide for more efficient training and equipment. Dr. Haubrich graduated from Ohio State University College of Medicine, Columbus, in 1937 and entered the service May 18, 1942.

Captain Oscar A. Axelson

Capt. Oscar A. Axelson, formerly of Youngstown, Ohio, was recently awarded the Bronze Star for meritorious service in support of combat operations in France, Belgium and Germany as divisional surgeon with the headquarters company of the Third Armored Division. Dr. Axelson graduated from the University of Michigan Medical School, Ann Arbor, in 1930 and entered the service July 30, 1942.

Captain James R. Karns

Capt. James R. Karns, formerly of Baltimore, was recently awarded the Bronze Star for meritorious achievement in South Pacific military operations. Dr. Karns graduated from the University of Maryland School of Medicine and College of Physicians and Surgeons in 1940 and entered the service April 20, 1942.

Captain Frank S. Skura

Capt. Frank S. Skura, formerly of Wilmington, Del., was recently awarded the Bronze Star for his work in the period from Sept. 8, 1944 to Feb. 8, 1945 in France, Germany and Luxembourg. Dr. Skura graduated from Georgetown University School of Medicine, Washington, D. C., in 1935 and entered the service June 20, 1942.

Captain James I. Rhiel

The Silver Star was recently awarded to Capt. James I. Rhiel, formerly of Columbus, Ohio, for rescue work under fire at Manila on Feb. 3, 1945. Dr. Rhiel graduated from the Ohio State University College of Medicine, Columbus, in 1940 and entered the service Aug. 28, 1942.

Major John G. Anderson

Major John G. Anderson, formerly of Lynchburg, Ohio, was recently awarded the Bronze Star for "meritorious achievement in connection with military operations against the enemy" on Mindanao Island, the Philippines. Dr. Anderson graduated from the University of Cincinnati College of Medicine in 1930 and entered the service Aug. 1, 1942.

Captain Stephen E. Muller

The Bronze Star was recently awarded to Capt. Stephen E. Muller, formerly of Baltimore, "for meritorious achievement in South Pacific military operations." Dr. Muller graduated from the University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, in 1937 and entered the service April 20, 1942.

NAVY

UNITED STATES MEDICAL FACULTY COMMENDED BY NAVY

A certificate of commendation was recently presented to Dean Francis S. Smyth and the faculty of the University of California Medical School, Berkeley, by the Bureau of Medicine and Surgery of the United States Navy for cooperation in the training of physicians for the naval service. The certificate was accompanied by a letter from Vice Admiral Ross T. McIntire, Surgeon General of the Navy, in which he congratulated the members of the faculty for their contribution to the war effort and to medical education, stated that he realized the extreme difficulties and obstacles that had to be overcome in accelerating instruction and changing methods in teaching with a faculty depleted by demands of the services and saying "I feel that medical schools have given a most distinguished service which has had considerable effect on the war effort."

Also in connection with the Navy's training program, Rear Admiral C. H. Wright, commandant of the 12th Naval District, sent a letter in which he expressed sincerest appreciation on behalf of the Navy for the contribution of Dean Smyth in screening the Navy V-12 premedical candidates during the past two years. As a result the Navy was provided with the highest caliber of trainees, Admiral Wright stated.

NAVY AWARDS AND COMMENDATIONS

Captain Gordon B. Tayloe

The Legion of Merit was recently awarded to Capt. Gordon B. Tayloe, formerly of Aulander, N. C., "for exceptionally meritorious conduct in the performance of outstanding services to the government of the United States as senior medical officer of the United States Naval Group in China from Sept. 29, 1943 to June 5, 1945. Faced with the gigantic task of establishing medical facilities throughout China for the care of American naval personnel and their Chinese allies," the citation continued, "Captain Tayloe moved steadily forward in this cooperative enterprise and, despite difficult problems of supply, transportation and limited personnel, succeeded in setting up medical units in some of the most hazardous and inaccessible parts of China, including many places behind the Japanese lines. By his personal devotion and competent professional supervision, he led his organization in the creation of a remarkable record of health for Americans in some of the most disease-ridden areas of the world and brought the aid of modern medicine to thousands of Chinese guerillas who had never known it before, thereby effecting and maintaining high standards of Sino-American relations, which resulted in benefits to every American in his theater and will be of lasting value to his country. His superb leadership, resolute courage and unwavering devotion to duty reflect the highest credit on Captain Tayloe and the United States Naval Service." Dr. Tayloe graduated from the University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, in 1927 and entered the service Jan. 28, 1944.

Commander Paul Titus

Comdr. Paul Titus, Pittsburgh, was recently commended by the Secretary of the Navy, James Forrestal, "for outstanding service while on duty in the Personnel Section of the Bureau of Medicine and Surgery. Skilled and untiring in carrying out an assignment demanding the highest qualities of discrimination and thoroughness, Commander Titus rendered distinctive service in establishing a professional standard for intern and residency training in naval hospitals, contributing materially to the care of naval personnel. Prior to appointment and active duty assignment in the Medical Corps of the United States Naval Reserve, Commander Titus was unstinting in his cooperative efforts toward the establishment of professional classification of reserve medical officers and the procurement of important data, obtained at considerable personal expense and inconvenience. His valuable contribution toward the war effort in this specialized field reflects the highest credit on Commander Titus, his profession and the United States Naval Service." Dr. Titus graduated from Yale University School of Medicine, New Haven, Conn., in 1911 and entered the service July 22, 1944.

Lieutenant Ferdinand Victor Berley

The Bronze Star was recently awarded to Lieut. Ferdinand Victor Berley, formerly of Chicago, "for heroic service while attached to the staff of the Medical Dispensary at Cavite Navy Yard in the Philippines, during and subsequent to the bombing attack by enemy Japanese forces on Dec. 10, 1941. Undaunted by the continuous bursting of enemy bombs," according to the citation, "which rained death and destruction and rendered the Navy Yard a blazing inferno, Lieutenant (then Lieutenant junior grade) Berley administered first aid with prompt and unfailing efficiency despite the danger and confusion. Working rapidly and with resourceful initiative he assisted other medical officers present in caring for more than 100 wounded and injured before arrangements were made to transfer casualties by boat and by truck to the Canacao Hospital, where he continued his valiant efforts during the subsequent evacuation of all patients to the Sternberg General Hospital in Manila. Concerned only for the safety of our sick and wounded, Lieutenant Berley rendered gallant service until ultimately taken prisoner by the Japanese. His steadfast courage, resolute fortitude and self-sacrificing devotion to duty in the face of extreme peril reflect the highest credit on Lieutenant Berley and on the United States Naval Reserve." Dr. Berley graduated from Northwestern University Medical School, Chicago, in 1939 and entered the service Aug. 23, 1939.

Lieutenant Commander Ward W. Briggs

For meritorious service aboard a hospital ship from September 1943 to January 1945 Lieut. Comdr. Ward W. Briggs, formerly of Wilmington, Del., was recently awarded a special commendation at the U. S. Naval Hospital, Corona, Calif. The commendation stated that his outstanding skill was responsible for alleviating suffering and minimizing the loss of life during his tour of duty aboard the hospital ship. Dr. Briggs graduated from Johns Hopkins University School of Medicine, Baltimore, in 1936 and entered the service in April 1941.

MISCELLANEOUS

HOSPITALS NEEDING INTERNS AND RESIDENTS

The following hospitals have indicated to the Council on Medical Education and Hospitals that they have not completed their house staff quota allotted by the Procurement and Assignment Service:

INDIANA

Caylor-Nickel Clinic, Bluffton. Capacity, 51; admissions, 1,942. Dr. Harold D. Caylor, Director (residents—mixed service, April 1).

MARYLAND

South Baltimore General Hospital, Baltimore. Capacity, 170; admissions, 5,951. William A. Dawson, Director (intern, April 1).

MASSACHUSETTS

Belmont Hospital, Worcester. Capacity, 250; admissions, 1,061. Dr. Huston K. Spangler, Superintendent (resident—communicable diseases; resident—tuberculosis, April 1).

Memorial Hospital, Worcester. Capacity, 215; admissions, 7,713. Dr. Winthrop B. Osgood, Medical Superintendent (3 interns).

NORTH CAROLINA

Charlotte Memorial Hospital, Charlotte. Capacity, 528; admissions, 7,733. Mr. Carl I. Flath, Administrator (residents—physician-veterans—medicine, radiology, pathology).

OHIO

Fairview Park Hospital, Cleveland. Capacity, 201; admissions, 6,170. Mr. Philip Vollmer Jr., Superintendent (intern).

Lima Memorial Hospital, Lima. Capacity, 182; admissions, 5,300. Mr. Leslie Fonkalsrud, Superintendent (interns).

PENNSYLVANIA

St. Joseph's Hospital, Lancaster. Capacity, 260; admissions, 5,138. Sister Mary Turibia, Administrator (interns; residents—mixed service).

VIRGINIA

Norfolk General Hospital, Norfolk. Capacity, 393; admissions, 9,851. Mr. R. J. Stull, Superintendent (interns).

PHYSICIANS SEPARATED FROM SERVICE

ARMY MEDICAL CORPS OFFICERS RECOMMENDED FOR/OR RELIEVED FROM ACTIVE DUTY

Alabama

Majure, Ernest O., Lt. Col., Elmore County Bldg., Wetumpka.

Arizona

Ness, Ansten R., Capt., M-I Hosp., Miami.
Stump, Robert M., Major, 1633 W. Van Buren St., Phoenix.

Arkansas

Hathcock, Alfred H., Major, 400 Washington St., Fayetteville.
McKenzie, Jim, Capt., 602 S. Hamilton, Hope.

California

Anton, Albert N., Capt., 826 S. 3d Ave., Los Angeles.
Ashton, Paul L., Capt., 1249 4th Ave., San Francisco.
Bilker, Daniel, Capt., 330 Gordon Ave., San Jose.
Blount, Lester L., Major, 14 Hatton Ave., Spreckels.
Bochenek, John E., Capt., 620 S. Clela Ave., Los Angeles.
Breger, Samuel, Major, 1502 Vallejo St., San Francisco.
Brown, George E., 1st Lt., 5836½ Camerford Ave., Hollywood.
Brownsberger, Sidney B., Major, 630 Atkins Dr., Glendale.
Calden, Willard S., Major, 66 El Camino Real, Berkeley.
Combs, Robert C., Capt., 8 Santa Ynez Arc, San Francisco.
Conrad, William F., Capt., 132 W. Orange Dr., Whittier.
Corp, Keith W., Capt., Monterey County Hosp., Salinas.
Counter, Henry M., Major, 821 Grand Ave., Buena Park.
Dement, John C., Capt., Rm. B., City Hall, Oakland.
Exelby, Paul A., Capt., 621 E. Penn St., Whittier.
Fishman, Harold C., Capt., 1200 N. State St., Los Angeles.
Fratis, Anthony M. Jr., Lt. Col., 204 Wayne Ave., Oakland.
Fullenlove, Thomas M., Capt., 450 Sutter St., San Francisco.
Gardiner, Joseph P., Capt., 1506 Stearns Dr., Los Angeles.
Globerson, Irwin, Major, 263½ West Blvd., Los Angeles.
Hilde, Stanley N., Capt., 3972 Main St., Riverside.
Kaarboe, Olav, Major, 2465 Filbert St., San Francisco.
Kaufman, Bernard Jr., Capt., 2442 Broadway, San Francisco.
McMillan, Thomas M., Capt., 7510 Pepita Way, La Jolla.
Mitchell, Charles S., Major, 838 University Ave., Fresno.
Norton, John A., Capt., 719 N. Miller St., Santa Maria.
Ovesey, Lionel, Capt., 4811 Lexington St., Los Angeles.
Polson, Adam B., Capt., 160 Thurston Ave. W., Los Angeles.
Quick, Edwin D., Major, 3616 Main St., Riverside.
Quinn, Henry F., Capt., 343 E. Main St., Stockton.
Ratner, Reuben, Capt., 42 Rossi Ave., San Francisco.
Reed, Walker W., Capt., Nevada City.
Robinson, Frank H., Major, 298 3d St., Chula Vista.
Rogers, Layton S., Capt., 421 Haviland Ave., Whittier.
Samson, Paul C., Major, 411 30th St., Oakland.
Spivey, William L., Col., 426 North St., Taft.
Taylor, L. M., Major, 2316 Arrowhead Ave., San Bernardino.
Threlfall, Donald R., Capt., 625 S. 16th St., San Jose.
Tompkins, Harold P., Lt. Col., 4480 Mulberry St., Riverside.
Turner, Ewing L., Capt., 119 S. Edgemont St., Los Angeles.
Van Tassell, Lloyd R., Capt., 5640 Ocean View Dr., Oakland.
Westcott, Albert G., Capt., Route 1, Box 180, Arlington.
Yost, Ralph E., Major, 1650 Melwood Dr., Glendale.
Zelman, Julius, Major, 1533 Mt. View, San Bernardino.

Colorado

Anderson, Lloyd W., Capt., 203 Division Ave., Sterling.
Boucher, Adlore L., Major, St. Joseph's Hosp., Denver.
Griffin, John G., Major, 26-1 S. Jackson St., Denver.
Hansen, Alton S., Major, La Junta.
Newburn, Walter L., Major, 1315 Alta, Trinidad.
Sanford, Gilman E., Lt. Col., 227 16th St., Denver.

Connecticut

Bizzozero, O. J., Lt. Col., 290 Country Club Rd., Waterbury.
Buckley, Willard E., Capt., 23 Mazzotta Pl., Middletown.
Cardone, Michael J., 1st Lt., 2989 Main St., Bridgeport.
Dorian, Edward, Capt., 152 Arch St., New Britain.
Field, Albert S. Jr., 1st Lt., Brooklyn.
Fischer, William J. H. Jr., Capt., 3 Lafayette St., Milford.
Flett, James Jr., Capt., 789 Howard Ave., New Haven.
Peltz, William L., Capt., 158 Whitney Ave., New Haven.
Robbins, Clarence L., Major, 303 Ridge Rd., Hamden.

Delaware

Alden, John W. Jr., Capt., 2708 Creston Pl., Wilmington.
Ferguson, W. R., Major, A. I. duPont Institute, Wilmington.
Fitchett, Laurence L., Capt., 204 S. Walnut St., Milford.
McGuire, Harry T., Capt., 212 Delaware St., New Castle.

District of Columbia

Cuvillier, L. M. Jr., Capt., 4107 Harrison St. N.W., Washington.
Finley, Charles F., Capt., 2210 Nichols Ave. S.E., Washington.
Fleury, George J. Jr., Capt., 1523 22d St. N.W., Washington.
Foster, F. J., Major, 1463 Rhode Island Ave. N.W., Washington.
Gusack, Milton, 1st Lt., 3730 Oliver St., Washington.
Stokes, Walter R., Lt. Col., 1835 Eye St. N.W., Washington.
Van Kinsbergen, M. Capt., 2000 Conn. Ave. N.W., Washington.

Florida

Alberts, Irving L., Capt., 3083 N. Bay Rd., Miami Beach.
Brannan, Max, Lt. Col., 5762 S.W. 30th St., Coral Gables.
Gleason, Albert H., Capt., 16 Central Ave., Umatilla.
Hinton, Andrew H., Major, 416 Ingraham Bldg., Miami.
Holecek, Frank, Capt., 4865 5th Ave. N., St. Petersburg.
Stewart, Joseph S., Col., 3774 Ingraham Highway, Miami.

Georgia

Canipelli, Joseph, Capt., 729 Ponce de Leon Ct. N.E., Atlanta.
Galin, Albert N., Major, 529 Norwich St., Brunswick.
Gibson, Roy L., Capt., 1523 Hilton Ave., Columbus.
Milford, James H., Capt., Georgia Baptist Hosp., Atlanta.
Miller, Linus J., 1st Lt., 811 Med. Arts Bldg., Atlanta.
Smith, John E., Major, 403 S. Lee St., Thomson.
Vandiviere, Stuart P., Lt. Col., Dawsonville.

Idaho

Besecker, Lester D., Major, Port Hill.
Handford, William B., Major, 600 S. 18th, Caldwell.

Illinois

Abbott, Orville L., Major, 1121 E. Grove St., Bloomington.
Axelrod, David, 1st Lt., St. Francis Hosp., Peoria.
Baker, William J., Lt. Col., 5830 Stony Island Ave., Chicago.
Bank, Edward W., Capt., 4320 N. Clarendon, Chicago.
Barker, Marion H., Col., 303 E. Superior St., Chicago.
Barringer, Donald M., Capt., Lincoln.
Bass, Howard H., Lt. Col., 34 S. Menard Ave., Chicago.
Bell, Anthony J., Capt., 1320 20th St., Rock Island.
Bell, William P., Capt., 4606 N. Hamlin Ave., Chicago.
Belmonte, John V., Lt. Col., 1230 N. Massasoit Ave., Chicago.
Berger, Edward M., Capt., 3014 Hollywood Ave., Chicago.
Bonnell, Ellis, Lt. Col., 723 S. Prairie, Champaign.
Bower, Willis H., Capt., 515 N. Chambers St., Galesburg.
Boyer, R. C., Lt. Col., Billings Hosp., 950 E. 59th St., Chicago.
Buczynski, Charles C., Major, 2312 Augusta Blvd., Chicago.
Burack, Samuel, 1st Lt., 100 E. Jeffrey St., Kankakee.
Cahan, Aaron S., Capt., 4040 N. Albany Ave., Chicago.
Callen, Irwin R., Capt., 5901 W. Rice St., Chicago.
Conley, Raymond H., Capt., 2256 N. Kedzie Blvd., Chicago.
Czeisler, Tibor, Capt., 7700 S. Bennett Ave., Chicago.
Defeo, Herman F., Lt. Col., 7 W. Madison St., Chicago.
Deutsch, Jack B., Capt., 1923 N. Newland Ave., Chicago.
Diggs, Arthur E., Lt. Col., 122 S. Michigan Ave., Chicago.
Ditkowsky, Sol P., Capt., Normal.
Dollear, Henry A., Capt., 1631 Mound Ave., Jacksonville.
Dwyer, John J., Major, 7940 S. Ada St., Chicago.
Ernest, Dwight M., Capt., 702 Bradley Ave., Peoria.
Fishman, Jacob S., Capt., 740 Independence, Chicago.
Fliesser, Werner, Capt., 419 E. Penn St., Hoopeston.
Floreth, Nelson K., Major, 901 Franklin St., Litchfield.
Freeman, Gustave, Major, Univ. of Chicago Clinics, Chicago.
Giffin, Lewis A., Major, 435½ Buff St., Alton.
Gorvett, Edmund A., Capt., 720 N. Michigan Ave., Chicago.
Green, Frank C., Major, 700 S. 2d St., Chillicothe.
Humm, John J., Capt., 3412 S. Harlem Ave., Riverside.
Jacobs, Frank D., Capt., Farmington.
Kaminski, Paul J., Capt., 2434 W. 24th Pl., Chicago.
Kanthak, Frank F., Major, 808 S. Wood St., Chicago.
Kimble, Harley E., Capt., 8156 S. Laflin St., Chicago.
Kligerman, Sidney, 1st Lt., 3617 W. Polk St., Chicago.
Kolb, Leonard H., Major, 2810 N. Spaulding Ave., Chicago.
Lehman, Joseph W. Jr., Capt., 718 E. McKinley St., Belleville.
Leshin, Norman, Major, 5480 Cornell Ave., Chicago.
Longwell, Charles W., Major, 302 E. St. Louis St., Nashville.
Marcus, Philip M., Capt., 3800 Lake Shore Dr., Chicago.
Michmerhuizen, Robert E., Capt., Ravenswood Hosp., Chicago.
Mills, Morton J., Lt. Col., 1604 E. 79th St., Chicago.
Mullon, Vance S., Capt., 3000 Indiana, Chicago.
Parker, George M., Capt., 330 Moss Ave., Peoria.
Patt, John E., 1st Lt., 2736 W. 64th St., Chicago.

PHYSICIANS SEPARATED FROM SERVICE

Illinois—Continued

Pierce, Mila I., Capt., 1835 S. Spaulding Ave., Chicago.
Rhea, Keith, Major, 620 W. Adams St., Clinton.
Ricketts, Frederick J., Major, Sadorus.
Roberson, William V., Capt., N. 9th St., Wood River.
Seid, Ben, 1st Lt., 5640 Winthrop Ave., Chicago.
Sexton, George A., Major, 415 N. State St., Monticello.
Sheagren, John W., Lt. Col., 303 Empire Bldg., Rockford.
Smith, William B., Major, Grand Ridge.
Stevens, Theodore R., Capt., 2711 Morse Ave., Chicago.
Stokes, Robert F., Capt., 1600 S. 60th St., Cicero.
Tesar, Frank J., Capt., 4021 N. 21st Pl., Chicago.
Tucker, Francis C., Major, 1418 E. 54th Pl., Chicago.
Turner, Samuel J., Capt., 4923 N. Ridgeway, Chicago.
Van Dorf, Nathaniel, Capt., 1238 S. Harding Ave., Chicago.
Wallheiser, La Verne M., Capt., 7135 E. End Ave., Chicago.
Weintraub, Jerome B., Capt., 681 S. State St., Lincoln.
Zivin, Simon, Capt., 2138 Evergreen Ave., Chicago.

Indiana

Adler, Raymond N., Capt., 907 Delaware St., Evansville.
Arlook, Theodore D., Capt., 409 Baldwin St., Elkhart.
Austin, Eugene W., Major, 1433 N. Pennsylvania, Indianapolis.
Brown, Frederic W., Major, 719 Union, Apt. N-2, Fort Wayne.
Clark, Fred O., Capt., Box 187, Syracuse.
Cohen, Benjamin B., Major, 4117 Parrish Ave., East Chicago.
Combs, Herman T., Major, R. R. 1, Box 341, Evansville.
Comer, Kenneth E., Capt., Mooresville.
Cotter, Edward R., Capt., 4220 Homerlee, East Chicago.
Davidson, Morris, Major, 1129 Lafayette St., Elkhart.
Davis, Sam J., Major, 431 E. National Ave., Brazil.
Dyer, George W., Capt., 2710 Wilson Dr., Terre Haute.
Freeman, Joseph W., Capt., Syracuse.
Ganz, Max, 1st Lt., 1309 W. 5th St., Marion.
Gitlin, William A., Capt., 528 W. Market St., Bluffton.
Good, Richard P., Major, 417 Conradt St., Kokomo.
Gosman, James H., Capt., 317 N. Clay, Jasper.
McCool, Joe H., Capt., 1435 Emmett St., Evansville.
Mueller, Paul F., Lt. Col., 547 Ridge Ave., Lawrenceburg.
Nigh, Rufus M., Capt., Fairland.
Pearson, William E., Capt., 290 N. Wabash St., Wabash.
Perry, Frederick G., Capt., 700 S. Michigan St., Plymouth.
Sala, Joseph J., Capt., 537 Taft Pl., Gary.
Scherschel, John P., Capt., 1226 N. Illinois, Apt. 10, Indianapolis.
Shaffer, Kenneth L., Capt., 103 N. 6th, Vincennes.
Voges, Edward C., Major, 1402 Wabash Ave., Terre Haute.
Wiseheart, Robert H., Major, 224 Barrone St., Lebanon.
Wood, Opal L., Capt., 113 N. Walnut St., Brazil.

Iowa

Blackstone, Martin A., Capt., 3321 Floyd Ave., Sioux City.
Caulfield, John D., Major, 3 W. Main St., New Hampton.
Chandler, Weldon P., Capt., Danburg.
Conzett, Donald C., Lt. Col., 2020 S. Grandview Ave., Dubuque.
Greek, Louis M., 1st Lt., 1169 7th St., Dos Moines.
Klocksiem, Harold L., Capt., Rippey.
Loeck, John F., Capt., Aurora.
Penn, Eugene C., Capt., 225 5th St., West Des Moines.
Snyder, Dean C., Capt., 825 7th St., DeWitt.

Kansas

Basham, Charles E., Major, Basham Hosp., Eureka.
Clark, Orville R., Major, 221 Woodlawn Ave., Topeka.
Maxson, Theodore R., Capt., 723 E. Jackson St., Iola.
Patterson, Harold L., Capt., 502 S. Douglas, Lyons.
Petterson, Cecil E., Major, State Sanatorium, Norton.
Robinson, Leo D., Capt., 107 N. 1st St., Iola.
Speirs, Richard E., Major, 206 Walnut, Dodge City.

Kentucky

Bale, Shelby G., 1st Lt., Elizabethtown.
Bush, Joe M., Major, 425 N. Maysville St., Mount Sterling.
Corum, Ward L., Capt., 1481 S. 18th St., Louisville.
Doak, Alfred D., Lt. Col., 708 Magnolia Ave., Shelbyville.
Klein, Max D., Major, 918 Magnolia St., Skelbyville.
McAtee, John D., Major, 108 Beechwood Rd., Covington.
Stone, Thomas B., Capt., Hickman.
Veirs, Everett R., Major, Second Nat'l Bank, Ashland.
Vesper, Albert J. Jr., Major, 715 Monroe Ave., Newport.

Louisiana

Bertinot, Gerald J., Capt., Sunset.
Cash, Ralph L., Capt., Charity Hosp., New Orleans.
Charbonnet, L. S. Jr., Major, 2809 Audubon St., New Orleans.
Condie, Dominic S., Capt., 502 Alexander St., Monroe.

Louisiana—Continued

Easterly, Clay E., Capt., % Jake Agosta, Plaquemine.
Filizola, Attilio V., Capt., 12028 Mehle Ave., Arabia.
Gajan, Isidore W. Jr., Capt., 120 Lee St., New Iberia.
Kramer, Elmer E. W., Major, 2030 Penniston St., New Orleans.
Talbot, Ralph J., 1st Lt., 616 N. 2d St., Monroe.
Ware, Francis L., Capt., 3503 Gen. Pershing St., New Orleans.

Maine

Courville, Albert L., Capt., 34 Franklin St., Rumford.
Dixon, Walter G., Capt., 16 Deering St., Norway.
Greco, Edward A., Lt. Col., 12 Pine St., Portland.
Jones, Richard P., Capt., 5 Franklin St., Belfast.
Lowry, Oram R. Jr., Major, 27 Oak St., Rockland.
McCrum, Philip H., Major, 15 Fairlawn Ave., South Portland.
Marston, Paul C., Major, 16 Federal Rd., Kezar Falls.
Page, Rosario A., Capt., 13 Coolidge Ave., Caribou.
Reed, James W., Major, Farmington.

Maryland

Bright, Albert S., Capt., 8359 Colesville Pike, Silverspring.
Corley, Karl C., Major, 105 Grafton St., Chevy Chase.
Franz, Bruce J., Capt., 2104 Rogers Ave., Baltimore.
Murray, James S. Jr., Capt., 4411 Greenway, Baltimore.
Racusin, Nathan, Capt., 206 S. Gilmor St., Baltimore.
Scott, Earl S., Capt., 3239 Powhatan Ave., Baltimore.
Yeager, G. H., Col., 1109 Harriton Rd., Poplar Hill, Baltimore.

Massachusetts

Allanson, James C., Major, 165 Cypress St., Brookline.
Bullock, Donald S., Capt., 15 Main St., Falmouth.
Castleton, Herbert E., Capt., 149 S. Union St., Rockland.
Cinella, John T., Capt., 97 Main St., Lee.
Cole, Lionel M., Capt., 74 North St., Pittsfield.
Comeau, William J. Jr., Major, 19 Lowell Ave., Haverhill.
Cosgriff, Stuart W., Capt., 53 Bartlett Ave., Pittsfield.
Cote, Gerard, Capt., 80 Linden St., Salem.
Coughlin, Edward J. Jr., Major, Ide Rd., Williamstown.
Dahill, William J., Capt., Old Sudbury Rd., Wayland.
Day, Harry L., Capt., City Hosp., Worcester.
DeMarco, Joseph Jr., Major, 156 Shrewsbury St., Worcester.
Drooker, Joshua C., Major, 15 Stratton, Dorchester.
Dunphy, John E., Lt. Col., 2 Netherlands Rd., Brookline.
Ellis, Laurence B., Lt. Col., 24 Francis Ave., Cambridge.
Ellis, Sydney, Major, 217 Princeton St. E., Boston.
Ernst, Robert G., Major, 30 Ford St., Springfield.
Faber, Max, Major, 1 County Rd., Chelsea.
Flynn, Herbert L., Lt. Col., State St., Belchertown.
Franklin, Stanley H., Capt., 1726 Commonwealth Ave., Boston.
Gahm, Irvin G., Major, Boston City Hosp., Boston.
Galbo, Samuel J., Capt., 19 Mechanic St., Shelburne Falls.
Howard, James H., Capt., 560 Tyler St., Pittsfield.
Jolliffe, Leslie S., 1st Lt., 10 Meadow St., Suquantun.
Lyman, James R., Capt., 24 Forest St., Wellesley Hills.
Lynch, Joseph P., Capt., 256 Walnut St., Brookline.
Mandrachia, Alfonso C., Capt., 9 Wolcott St., Everett.
Mulhern, John F., Capt., 29 Spring St., Taunton.
Sherwin, Herbert, Major, 1445 Cambridge St., Cambridge.
Showstack, Irving, Capt., 9 Richardson Ave., Wakefield.
Swank, R. L., Major, 489 Commonwealth Ave., Newton Center.
Tadeo, Arthur E., Capt., 44 Walnut, Natick.
Tilden, Benjamin R., Capt., Main St., Marion.

Michigan

Alfenito, Felix S., Capt., 328 Union S., Grand Rapids.
Bailey, Carl C., Capt., 12824 Broad St., Detroit.
Baluss, John W. Jr., Capt., Lane Hall, Ann Arbor.
Beitman, Max R., Capt., 17368 Indiana, Detroit.
Brace, Fred C., Major, 2311 Marywood Blvd., Grand Rapids.
Bruno, Nicholas J., Capt., Stambaugh.
Burnstine, Perry P., Capt., 8451 La Salle Blvd., Detroit.
Cooper, Donald R., Capt., 2329 Glenwood Dr., Kalamazoo.
Dawson, Walter D., Capt., 1124 Bates St. S.E., Grand Rapids.
DeBoer, Guy W., Capt., 11 Maryland N.E., Grand Rapids.
Diamond, Bernard L., Major, University Hosp., Ann Arbor.
Domeier, Luverne H., Capt., Wayne Univ. Med. Sch., Detroit.
Ferrand, Louis G., Capt., 236 E. Maple St., Rockford.
Gordon, Devitt L., Lt. Col., 2121 Harrison St., Muskegon.
Greenberg, Morris Z., Capt., 3259 Sturtevant, Detroit.
Hamilton, Earl E., Capt., 156 E. Front St., Traverse City.
Hanna, Roger J., Lt. Col., 1301 W. Washington Ave., Jackson.
Heneveld, Edward H., Capt., 15324 E. Jefferson Ave., Detroit.
High, Howard C. Jr., Capt., 1420 Washington Hts., Ann Arbor.
Iler, Harris D., Major, 625 Jackson St., Clinton.
Juliar, Benjamin, Major, 17305 Muirland Ave., Detroit.

PHYSICIANS SEPARATED FROM SERVICE

Michigan—Continued

Kinzel, Robert J. W., Capt., 103 S. Chicago St., Litchfield.
Lansky, Mandell, Capt., 1247 Clairmont Ave., Detroit.
McDonnell, Walter, Capt., Pinconning.
Maison, George L., Major, Detroit.
Mintz, Morris J., Capt., 108 E. Fairplains, Greenville.
Procailo, Alexander B., Capt., 5820 Trenton St., Detroit.
Rice, Clair M., Capt., 1350 E. Jefferson Ave., Detroit.
Riggs, Harry L., Capt., 6733 Stanford Ave., Detroit.
Slagh, Earl M., 1st Lt., Elsie.
Stamell, Meyer, Capt., 3256 Calvert, Detroit.
Symons, Hyman, Major, 3160 2d Blvd., Detroit.
Terris, Charles Z., Capt., 900 Lincoln Rd., Grosse Pointe.
Thomas, Joseph W., Capt., 3818 Industrial Ave., Flint.
Thomson, Daniel C., Capt., University Hosp., Ann Arbor.
Toney, William E., Capt., 410 N. 8th St., St. Joseph.
Valk, William L., 1st Lt., 14 Geddes Heights, Ann Arbor.
Van Gorder, George F., Capt., Davison.
Van't Hof, Albert, Major, 547 Livingston N.E., Grand Rapids.
Van Wagnen, Frederick I., Capt., 123 Wall St., Jackson.
Vergosen, Harry E., Major, 9765 N. Martindale Ave., Detroit.
Vida, Alexander, Capt., 137 N. Harrington Ave., Detroit.
Vollmar, George K., Major, 870 Seward, Detroit.
Watson, Douglas J., Capt., 14500 Piedmont Rd., Detroit.
Weiss, Casimir P., Capt., 11814 Wilshire, Detroit.
Wells, Kenneth N., Capt., Spring Lake.

Minnesota

Bailey, Robert B., Capt., Fairmont.
Caspers, Carl G., Major, 4506 Lyndale Ave. S., Minneapolis.
Clark, Henry B. Jr., Major, 594 Montrose Lane, St. Paul.
Cummings, Damon W., Capt., Rushford.
Freeman, William N., Capt., Perham.
Gillespie, Delmar R., Major, 1143 1st St. N.W., Rochester.
Gilman, Lloyd C., Major, Box 58, Atwater.
Goss, Henry C., Major, 1421 Ives Ave., North Glencoe.
Grau, Robert K., Capt., 1375 W. California St., St. Paul.
Heck, William W., Major, 1212 Hawthorne Ave., St. Paul.
Henslin, Merrill E., Capt., LeRoy.
Hollinshead, William H., Major, 911 Goodrich Ave., St. Paul.
Kiesler, Frank G. Jr., Capt., U. of Minn. Hosps., Minneapolis.
Lipschultz, Oscar, Lt. Col., 2790 Xerxes Ave. S., Minneapolis.
Mayo, Charles W., Col., Mayo Clinic, Rochester.
Schmidt, Walter R., Major, Worthington.
Sturley, Rodney F., 1st Lt., General Hosp., Minneapolis.
Troost, Henry B., Capt., 711 Lincoln Ave., St. Paul.
Vanderhoff, Edward S., Major, Excelsior.

Mississippi

Weatherford, W. J., Capt., 729 Washington Ave., Pascagoula.

Missouri

Baers, Harry A., Major, 3945 W. Florissant Ave., St. Louis.
Devereaux, James A., Major, 508 N. Grand Blvd., St. Louis.
Jensen, Joshua E., Capt., 3720 Washington St., St. Louis.
Kelling, Douglas G., Major, Waverly.
Rost, William B., Major, 2422 Duncan St., St. Joseph.
Throgmorton, Howard B., Capt., Park Ave. Apts., Sikeston.
Votaw, Robert E., Major, 10 Warren Terrace, Clayton.
Wade, Frederick E., Capt., 2815 Olive St., Kansas City.
Warson, Samuel R., Capt., 4515A Laclede Ave., St. Louis.
Windmiller, Myrl E., Capt., 2540 Charlotte, Kansas City.

Montana

Bussabarger, Robert A., apt., 219 South Ave. W., Missoula.
Eneboe, Paul L., Capt., 213 S. Willson, Bozeman.
Hammerel, John J., Capt., 233 Avenue C, Billings.

Nebraska

Anderson, Ronald C., Lt. Col., Columbus.
Fellman, Abe C., Capt., 5035 Emmet St., Omaha.
Ohme, Kenneth A., Capt., Mitchell.
Patton, John E., 1st Lt., 4628 Capitol Ave., Omaha.
Rodkinson, Bernard L., Capt., Crawford.
Staley, Sanford O., Capt., 702 S. 36th St., Omaha.

New Hampshire

Brody, Nathan, Capt., 1381 N. Main St., Laconia.
Roe, Addison, Capt., 35 Prospect St., Newport.
Wroblewski, Walter G., Capt., 7 Hall Ave., Nashua.

New Jersey

Bertha, Nicholas A., Capt., 293 S. Main St., Wharton.
Clunan, Ambrose P., Major, 9th St., Prospect Heights, Trenton.
Corson, Kenneth E., Major, Vineland.

New Jersey—Continued

Drake, Willard M. Jr., Capt., R.F.D. 4, Vineland
Ehrlich, Maxwell, Capt., 721 N. Broad St., Elizabeth.
Etheridge, Charles H., Lt. Col., 433 Prospect St., East Orange.
Gribbin, James A., Capt., 836 W. State St., Trenton.
Hamley, John J., Major, 153 2d St., Elizabeth.
Hawkes, Stuart Z., Lt. Col., 84 Washington St., Newark.
Irwin, Francis T., Capt., 253 Bloomfield Ave., Caldwell.
Karshmer, Ernest E., Capt., 927 S. Wood Ave., Linden.
Kohut, George J., Capt., 383 Lawrie St., Perth Amboy.
Krafchik, Louis L., Capt., 100 Bayard St., New Brunswick.
Miller, Reginald C., Major, 1420 Greenwood Ave., Trenton.
Newmayer, Joseph, Capt., 217 Union Ave., Delanco.
Novello, Joseph A., Major, 641 2d Ave., Elizabeth.
Quad, Clifford W., Major, 52 Northfield Ave., West Orange.
Ritota, Michael C., Capt., 301 Henry St., Orange.
Shapiro, Irving, Capt., 108 Schofield St., Newark.
Tansey, William A., Capt., 169 Hobart Ave., Short Hills.
Teschner, Bernard M., Capt., 9209 Hudson Blvd., North Bergen.
Timberlake, Baxter H., Major, 5414 Ventor Ave., Atlantic City.
Ward, Chauncey P., 1st Lt., 112 Chancellor Ave., Newark.
Watov, Samuel E., Capt., 615 Beatty St., Trenton.

New York

Adalman, Philip, Capt., 1018 E. 163d St., Bronx.
Ageloff, Harry, Capt., 69-81 108th St., Forest Hills.
Baron, Carl, Capt., 618 Ocean Parkway, Brooklyn.
Barrett, William A., Capt., 85 Baldwin Ave., Baldwin.
Beeber, Tobias, Capt., 35-30 153d St., Flushing.
Cacioppi, Thomas R., Capt., 7613 16th Ave., Brooklyn.
Carideo, Henry L., Major, 10 N. Fulton Ave., Mount Vernon.
D'Amanda, William D., Capt., 82 Fulton Ave., Rochester.
Daus, Milton J., Major, 201 S. Franklin St., Watkins Glen.
Davidson, William R., Capt., 184 Deer Park Ave., Bablon.
De Giorgio, Michele, 1st Lt., 3212 Seymour Ave., Bronx.
Earp, Ralph K., Capt., 420 E. 58th St., New York.
Favazza, Armando G., Capt., 1694 64th St., Brooklyn.
Feder, Edward P., Major, 155 E. Lincoln Ave., Mt. Vernon.
Gale, Julius P., Capt., 324 S. Wellwood Ave., Lindenhurst.
Geier, Paul B., Capt., 230 Broadview Ave., New Rochelle.
George, Henry L. Jr., Capt., 320 Holcomb St., Watertown.
Harrison, Francis F., Col., 1 Beaver St., Cooperstown.
Hartmann, Edmund M., Major, 87-88 Parsons Blvd., Jamaica.
Harwood, Mark R., Capt., 65 South St., Auburn.
Ingegno, Alfred P., Capt., 880 Carrol St., Brooklyn.
Jenkins, Donovan M., Major, 112 South Ave., Webster.
Jensen, Frode, Major, 103 Hampshire Rd., Syracuse.
Kabnick, Arthur B., Capt., 205 W. 88th St., New York.
Kenny, Francis E., Lt. Col., 519 Delaware Ave., Buffalo.
Lamb, Albert R. Jr., 1st Lt., 162 E. 70th St., New York.
Landes, Alexander V., Major, 1706 48th St., Brooklyn.
Lapidus, Bernard, Capt., 2820 Morris Ave., Bronx.
McLaughlin, John J., Major, 202 Lark St., Albany.
McMahon, Robert E., Lt. Col., St. Vincents Hosp., New York.
Maidman, Leonard, Capt., 1321 E. 10th St., Brooklyn.
Minor, Allen H., Capt., 70 Haven Ave., New York.
Moiel, Charles S., Capt., 85-32 Parsons Blvd., Jamaica, L. I.
Olson, Carl P., Major, 20 Mozart St., Binghamton.
Olszerski, Bronislaus S., Capt., 217 Lake Shore Dr. E., Dunkirk.
Ostrove, Lester L., Capt., Lincoln Hosp., Bronx.
Palanker, Harold K., Capt., 93 Homer Ave., Buffalo.
Palmer, Milton A., Capt., 18 Park Blvd., Lancaster.
Pirro, Nicholas J., Capt., 110 Franklin Ave., Solvay.
Rabbiner, Max, Major, 780 St. Marks Ave., Brooklyn.
Ragosta, Ralph J., 1st Lt., 7521 17th Ave., Brooklyn.
Rather, Lelland J., Capt., 160 Columbia Heights, Brooklyn.
Rivera, Rafael M., Capt., 150 W. 87th St., New York.
Robertson, Euston S., Capt., 776 Avenue C, Arlington.
Robin, Morris J., Capt., 35-43 72d St., Jackson Heights.
Robinson, John N., Lt. Col., 1192 Park Ave., New York.
Schechter, Milton, Major, 875 W. End Ave., New York.
Schutkeker, Bruno G., Lt. Col., 300 Davidson Ave., Buffalo.
Schnur, Jacob, Capt., 1010 Bryant Ave., New York.
Staab, Frederick D., Major, Highland Hosp., Rochester.
Stanton, Edwin Y., Major, 42-42 Union St., Flushing.
Staub, Philip L., Major, 723 LaFayette Ave., Brooklyn.
Tamse, Sidney, 1st Lt., 902 Montgomery St., Brooklyn.
Tenery, Robert M., Capt., 275 Ft. Washington Ave., New York.
Terranova, Anthony S., Major, 368 Avenue U, Brooklyn.
Untracht, Samuel, Capt., 133 20th St., Laurelton, L. I.
Urbont, Alexander R., 1st Lt., 783 Beck St., New York.
Vitagliano, Eugene, Capt., 4709 Ft. Hamilton Pkwy, Brooklyn.
Von Storch, T. J. C., Lt. Col., 15 Highland Dr. E., Greenbush.
Weisberg, Maurice A., 1st Lt., 41 Lott Ave., Brooklyn.
Zavod, William A., Major, 133 Archer Ave., Mount Vernon.

PHYSICIANS SEPARATED FROM SERVICE

North Carolina

Black, Paul A. L., Major, 218 N. 5th, Wilmington.
Bunn, Richard W., Capt., Reynolds Bldg., Winston-Salem.
Camp, Horton, Major, Camp Hosp., Pittsboro.
Farmer, William D., Major, Banner Bldg., Greensboro.
Gilreath, Robert A., Major, 719 Church St., Hendersonville.
Royster, James D., Capt., Benson.
Schwartz, Benjamin, Capt., Vet. Adm. Fac., Oteen.
Shelburne, Palmer A., Capt., 2602 Sherwood St., Greensboro.
Tart, Braston I. J., Capt., Four Oaks.

North Dakota

Arneson, Charles A., Major, 1110 8th St. S., Fargo.
Krogstad, Lorance T., Capt., Enderlin.
Schatz, George, Major, West Fargo.

Ohio

Aronoff, Nathan, 1st Lt., 36 W. Defiance St., Leipsic.
Ash, Edwin E., Major, Christ Hosp., Cincinnati.
Cook, Robert G., Capt., 3747 Dunkirk St., Cincinnati.
D'Amore, Amanto P., Capt., 1st St., Masury.
Freed, A. N., Capt., 3676 Traynham Rd., Shaker Heights.
Gray, Ralph E., Major, 1430 W. 81st St., Cleveland.
Kattus, Joseph H., Major, 2136 Highland Ave., Cincinnati.
Kaufman, Paul M., Capt., 2321 5th Ave., Youngstown.
Owen, John M., Capt., 4633 N. Dixie Blvd., Dayton.
Rawers, Clarence B., Capt., Bergholz.
Schwartz E. D., 1st Lt., 1720 Middlehurst Rd., Cleveland Hgts.
Shaheen, Gustav S., Capt., 3411 W. Tuscarawas St., Canton.
Taylor, Thomas L., Capt., Montpelier.
Tucker, Harry S., Major, 1840 Ansel Rd., Cleveland.
Urban, John P., Capt., 4475 N. High St., Columbus.
Van Buren, Harlow J. K., Capt., 201 W. Findlay St., Carey.
Wagner, John L., 1st Lt., 226 E. Main St., New London.
Welter, John A., Capt., 250 Outlook Ave., Youngstown.
Williger, Irwin F., Major, 36 N. Pleasant Ave., Osborn.

Oklahoma

Ballantine, Henry T. Jr., Major, 541 N. 16th St., Muskogee.
Nagle, Patrick S., Major, 1021 N. Lee, Oklahoma City.
Noell, Robert L., Major, 913 Med. Arts Bldg., Oklahoma City.
Price, Neel J., Capt., 131 N.E. 4th St., Oklahoma City.

Oregon

Adams, John M., Major, 801 Roseway Dr., Klamath Falls.
Barr, John R., Capt., 1023 Winona St., Portland.
Black, Neil F., Major, 907 Main, Klamath Falls.
Bree, Donald W., Major, 912 S.W. Vista Ave., Portland.
Caniparoli, Sante D., Lt. Col., 3264 N.E. Brice St., Portland.
Durham, Milton W., Lt. Col., 1506 6th St., LaGrande.
Earl, Charles N., Major, Cottage Grove.
Evans, John W., Major, Route 5, Box 428A, Portland.
Foster, Rae N., Capt., John Day.
Illge, Alfred H., Major, 1020 S.W. Taylor St., Portland.
Keizer, John P., Capt., 1418 N. Sherman Ave., North Bend.
Lewis, Herbert D., Major, 1115 Montello, Hood River.
McKim, Charles P., Major, 2515 1st St., Baker.
Miller, Robert F., Capt., 4229 N.E. Campaign, Portland.
Ornduff, William W., Capt., 6323 S.E. 29th St., Portland.
Sichel, Martin S., Major, 1730 S.W. Spring, Portland.
Stanard, Delbert C., Lt. Col., 321 IOOF Temple, Eugene.
Underwood, F. J., Major, 6450 S.W. Parkhill Way, Portland.

Pennsylvania

Atkinson, Daniel A., 1st Lt., 132 Oakwood Ave., West View.
Baker, Roy F., Capt., Madera.
Capriotti, Octavius A., Capt., 19 E. Broad St., Hatfield.
Carter, Alfred G., Capt., 739 Wheeler Ave., Scranton.
Dickerman, Frederick A., Capt., 6th & Elm St., Watsontown.
Dickstein, Benjamin, Major, 6013 Delancey St., Philadelphia.
Dietrich, Richard A., Capt., 421 52d St., Pittsburgh.
Diodati, Anthony D., Capt., 1526 S. Broad St., Philadelphia.
Feightner, Francis W., Lt. Col., Penn Albert Hotel, Greensburg.
Fleegler, Saul M., Capt., Edgewood Rd., New Kensington.
Forejt, Joseph M., Capt., E. Smithfield St., Mount Pleasant.
Goodman, Harry, Major, 536 Johnston St., Philadelphia.
Gregg, L. A., Lt. Col., Pasadena Dr., Fox Chapel, Sharpsburg.
Hagan, Eugene M., Capt., 904 Washington Ave., Oakmont.
Hammond, Charles P., Major, 134 N. Prince St., Lancaster.
Israel, Harold L., Capt., Sweet Water Rd., Glen Mills.
Winkler, Louis H. Jr., Capt., 921 Delaware Ave., Bethlehem.
Wood, Francis C., Col., Laurel Lane, Haverford.
Woolhandler, Harry W., Lt. Col., 624 W. 21st St., Erie.
Zeman, Erwin D., Lt. Col., 1965 Lakewide Dr., Erie.
Zimmerman, Franklin D., Capt., Schaefferstown.

Rhode Island

Beaudreault, Elphege A., Capt., 244 Lincoln St., Woonsocket.
DeNyse, Donald L., Capt., 922 Park Ave., Cranston.
Gammell, Edwin B., Capt., 1 Main St., Hope Valley.
Menzies, Gordon E., Lt. Col., W. Main St., Wickford.
Ruisi, Joseph L. C., Major, 13 Newton Ave., Westerly.

South Carolina

King, Joseph H., Lt. Col., R.R. 3, Summerton.
Melich, Edward I., Capt., 400 Waccamaw Ave., Columbia.
Pratt, John M., Major, Hickory Grove.
Walsh, John K., Capt., 421 S. Coit St., Florence.

South Dakota

Murdy, Carson B., Capt., 1219 N. Lincoln St., Aberdeen.

Tennessee

Boddie, James B. Jr., Capt., 615 Robert E. Lee Apt., Nashville.
Clarke, Charles L., Major, 2087 Cowden Ave., Memphis.
Coe, Isaac S., Capt., 1208 E. Parkway Blvd., South Memphis.
Currey, Doyle E., Capt., 1320 Lawrence, Chattanooga.
Fort, Garth E., Capt., Riverside Dr., Nashville.
Gayden, Hamilton V., Major, Franklin Rd., Nashville.
Grossman, Laurence A., Major, 3603 Central Ave., Nashville.
Higginbotham, J. M., Major, 1602 Berkley Circle, Chattanooga.
Riggs, James W., Capt., LaFollette.
Swisher, Otto J. Jr., Capt., S. Maple St., Covington.
Thomas, Edward P., 1st Lt., 2410 Jefferson St., Nashville.
Vapner, John B., Capt., 1969 Popular St., Memphis.

Texas

Ashley, R. W., Major, (Bus) 360 E. Olmas Dr., San Antonio.
Aves, Frederick H., Major, Dickinson.
Bannister, Mortimer H., Capt., Pearsall.
Bellamy, Russell M., Major, 806 N. Sommerville, Pampa.
Bunkley, Thomas A., Major, Stamford San., Stamford.
Childs, Tilden L. Jr., Capt., 2118 Stanley St., Fort Worth.
Collins, Robert P., Major, 1411 9th St., Wichita Falls.
Cowan, William K., Major, 4028 McFarlin Blvd., Dallas.
Featherston, Elmer W., Major, General Delivery, Swenson.
Garnett, John W. Jr., Lt. Col., 904 Ft. Worth Natl. Bank Bldg., Fort Worth.
Gooch, Frank B. Jr., 1st Lt., 5315 Harrisburg Blvd., Houston.
Greenlee, Ralph G., Capt., 1107 N. 4th St., Temple.
Hardwicke, Charles P., Major, 1409 Wathen, Austin.
Hartnett, Dalton C., Major, 1015 Travis Ave., Fort Worth.
Howerton, E. E., Lt. Col., Nix Professional Bldg., San Antonio.
Hudson, Isaac F., Lt. Col., 604 E. Reynolds, Stamford.
Jacobson, Harry, Capt., Box 536, Post.
Leach, Charles L. Jr., Capt., 2319 Riverside Dr., Houston.
Loeb, Sam A., Capt., 1101 Pine St., Sweetwater.
McClure, Wayne H., Capt., Box 487, Kermit.
Mozersky, Victor, Major, 301 E. Martin St., San Antonio.
Parchman, Hugh W., Capt., Overton.
Phillips, Gordon, Capt., Haskell.
Poetter, Henry W., Capt., Cameron.
Sanford, Herbert M., Capt., Perryton.
Sears, Ernest S., Capt., 6811 Airline Dr., Houston.
Smith, Gerald S., Capt., 1301 Broadway, Lubbock.
Strickland, John H., Capt., 309 Iowa St., Alice.
Tubbs, Harry A., Capt., Scott & White Clinic, Temple.
Van Beber, J. A., Capt., 306A N. Main, Gladewater.
Wood, W. R., Major, Med. Branch, U. of Texas, Galveston.
Yates, Charles W., Capt., Rosenberg.

Utah

Belnap, Howard K., Major, 2554 Brinker Ave., Ogden.
Gaon, M. D., Capt., Med. Sect. CASC Unit 1902, Ft. Douglas.
Jackson, Henry M., Capt., 141 1st Ave., Salt Lake City.
Voss, Bernard J., Capt., Columbia.

Vermont

Judd, Lester E., Major, N. Main St., Enosburg Falls.
Moskovitz, Abraham J., Capt., 43 Willow St., Burlington.

West Virginia

Barrett, Robert S., Major, Hamlin.
Bowers, Garvey B., Major, Kimball.
Harrison, Charles S., Major, 641 Dale Ave., Clarksburg.
Scott, Charles M., Capt., Groveland Dr., Bluefield.

Puerto Rico

Cabrera, Juan R., 1st Lt., 27 Ashford Ave., San Juan.
Gelpi, William P., Major, Charity District Hosp., Rajardo.
Nieves-Colon, J. de la C., Capt., 33 Gen. Contreras St., Cayey.
Ramirez de Arellano, Max D., Capt., U. of P. R., Rio Diedras.

ORGANIZATION SECTION

MINUTES OF THE ANNUAL SESSION OF THE HOUSE OF DELEGATES OF THE AMERICAN MEDICAL ASSOCIATION, HELD IN CHICAGO, DECEMBER 3-5, 1945

(Concluded from page 1111)

HOUSE OF DELEGATES

First Meeting—Monday Morning, December 3

REPORTS OF OFFICERS

Report of the Secretary

Dr. Olin West, Secretary, presented his report as printed in the Handbook, which was referred to the Reference Committee on Reports of Board of Trustees and Secretary.

Report of Board of Trustees

Dr. James R. Bloss, Chairman, presented the report of the Board of Trustees as printed in the Handbook, which was referred to the Reference Committee on Reports of Board of Trustees and Secretary, with the exception of the reports of the Bureau of Legal Medicine and Legislation and the Bureau of Public Relations, which were referred to the Reference Committee on Legislation and Public Relations; the report of the Bureau of Health Education, which was referred to the Reference Committee on Hygiene and Public Health, and the Report of the Council on Industrial Health, which was referred to the Reference Committee on Industrial Health.

Supplementary Report of Board of Trustees

Dr. Bloss presented the following Supplementary Report of the Board of Trustees:

1. Installation of President on Monday Evening

The Board of Trustees requests that the House of Delegates suspend the By-Laws and authorize the installation of the President on Monday evening, instead of on Tuesday evening, as provided in the By-Laws.

Dr. Arthur J. Bedell, Section on Ophthalmology, moved that the By-Laws be suspended as requested and the motion was seconded by Dr. Walter E. Vest, West Virginia, and carried.

2. Date of the San Francisco Session in 1946

The date selected by the Board of Trustees for the San Francisco Session of the Association is July 1-5, 1946.

3. Distribution by the American National Red Cross of Dried Blood Plasma Declared Surplus by Armed Forces

The American National Red Cross has presented to the Board of Trustees a plan for the distribution of dried blood plasma declared surplus by the armed forces.

4. Proper Utilization of Services of Physicians in a National Emergency

The following resolution was formulated by a committee appointed by the Board of Trustees after giving consideration to a suggestion made by Dr. James E. Paullin with a view to proper utilization of the services of physicians in a national emergency:

More than 60,000 physicians volunteered and rendered distinguished service in the various branches of the military organization in the war and many more have aided civilian organizations.

During these years of war much experience has been gained by those who served which can be used for the betterment of the organization of military medical service and a more efficient utilization of medical personnel in the medical departments of the armed forces.

The experience thus gained should be utilized for the benefit of the medical profession and for the military service in any future emergency requiring the withdrawal of many civilian physicians from medical practice.

The Board of Trustees would recommend to the House of Delegates that it authorize the Board of Trustees of the American Medical Association to appoint a committee of seven to be known as the Committee on Military Service. This committee shall include four civilian physicians who served in the war and three others. The committee will study the many communications that have been received and the suggestions made by physicians in the armed forces. The committee will also formulate policies for recommendations to be forwarded through the Surgeons General to the Secretary of War and the Secretary of the Navy expressing the views of the medical profession in planning for proper utilization of the services of physicians in any national emergency.

5. Animal Experimentation

With a view to combating legislation intended to prevent animal experimentation, the Board of Trustees has approved in principle the following statement for submission to the House of Delegates:

Much propaganda against animal experimentation has been fostered and disseminated by various poorly informed groups.

The benefits of medical research through animal experimentation have reached a majority of the people of the United States. Many lives have been saved during the war primarily by animal experimentation in the research on blood plasma and various drugs.

The benefits to mankind and to the animal kingdom have been great through the animal research in surgery and medicine, particularly related to rickets, hypertension, lockjaw, hookworm, rabies, diphtheria, diabetes and distemper.

Interference with animal experimentation would cause medicine to cease to progress in many ways.

Because there has been a determined attempt by groups to prevent further experimentation on animals, the House of Delegates of the American Medical Association approves the education of the public in the benefits both to men and to animals from animal experimentation and urges that the people of the United States be completely and thoroughly informed as to these benefits and as to the effect on further progress in research on various diseases, should such animal experimentation be forbidden in any state.

6. Much Needed Assistance to the Philippines

Dr. James E. Paullin, in response to a request from the Board of Trustees, made an investigation of medical conditions in the Philippine Islands while on a special mission to various islands in the Pacific area for the Surgeon General of the Navy and prepared the following report for the Board:

While we were on a special mission to various islands in the Pacific area for Vice Admiral Ross T. McIntire, Surgeon General of the United States Navy, permission was given Rear Admiral Winchell M. Craig and me to inquire into the facilities and needs of the Philippine Medical Association and the University Medical School and Hospital and to furnish you and the Board of Trustees of the American Medical Association with the results of this inquiry, thereby fulfilling your requests previously made to me. Of course you will realize that we had time to obtain only a general but fairly accurate view of the situation as it exists today.

The devastation brought on Manila as a result of the war is tremendous. Most of the beautiful public buildings, including the libraries, churches, schools and hospitals, were severely damaged or destroyed by bombings from our forces and more

so by the retreating Japanese. I am informed that the greatest damage inflicted on most of the buildings resulted from high explosives set off by the Japanese after their evacuation in order to prevent any use of the buildings by our forces.

For civilian use there are few or no telephones available. This made communication possible only by mail or personal visits. Your letter addressed to Dr. de Dios, president of the Philippine Medical Association, and Dr. Ayuyao, the secretary, was delivered by Dr. A. G. Sison, dean of the Medical School of the University of the Philippines. I was informed that Dr. Ayuyao had died and I was unable to communicate with the secretary of the society, so that your letter was given to Dr. Sison to be delivered to the secretary.

It requires but little stretch of the imagination to see what happened to the buildings of the University of the Philippines, the medical school, the hospital and the dormitories connected with this university. Many of the doctors were killed in battle or by the Japanese. At this time it is impossible to obtain a complete roster of the physicians in Manila. A very good sample of what happened is a statement from Dr. A. G. Sison, dean of the medical school and professor of medicine in the medical department of the University of the Philippines, to the effect that before the war he had 139 physicians on his staff and today he had 40.

The medical school has reopened and is the only one at this time accepting students. Twenty are enrolled in the first year class. Women are accepted in the same status as men. The hospital, which accommodated 1,000 patients before the war, is now able to take care of only 430 to 450 patients; the wards available for their use have been partially restored, but the patients are crowded. The outpatient department takes care of approximately 500 patients a day. A school of dentistry is part of the medical school. At the present time they have no students.

Not only are students who are selected for admission to the medical school those who have the best scholastic record, but from these are selected those who, after interviews with members of the faculty, are thought to have the qualities essential to make the best practitioners. After entrance into the medical department one failure in any subject is sufficient for dismissal from the school. The curriculum requires four years of college work and one year of internship, and each student is required to engage in some type of research before graduation.

The faculty at the present time is composed of forty members, and, as stated, Dr. A. G. Sison is the dean of the school and professor of medicine. His son, Dr. A. B. M. Sison, is the assistant professor of medicine and secretary of the college. Mrs. A. G. Sison, M.D., is professor of obstetrics and gynecology. We met other members of the faculty, but for the life of me I can't remember their names. Most of them are graduates of medical schools either in the United States or of the University of the Philippines Medical School.

The medical school and hospital are in need of help. They have practically no apparatus. Seven microscopes have been salvaged, and these have to serve the clinical laboratory of the hospital and also the students of the medical school. They have an old x-ray machine which they use with poor results. No high voltage therapy x-ray. There are very few surgical instruments, very few chemicals, no library, few books, very few magazines (and these are quite old), very few x-ray films. All of their hospital records accumulated since 1911 were destroyed or burned by the Japanese. The furnishings in the hospital are extremely meager. The diet is poor and the wards are excessively crowded. However, even though there is a scarcity of paper and no chart backs are available the records of patients are surprisingly good. The notes are full, the histories are good and the recorded examinations are thorough and complete.

It was really pitiful to go through their laboratories, their wards, their x-ray departments, their surgical department and to see how few supplies and how few chemicals they have, and how they would guard the little stains available. Had it not been for the kindness of the medical departments of the Navy and the Army they would not even have these supplies.

I had the pleasure of conversing with Mr. H. W. Endicott, who had just arrived in Manila and is on a commission from the United States government to advise about the disposal of surplus property. I spoke to Mr. Endicott about the needs of the Philippine General Hospital and the Philippine Medical School, and I am quite sure that those who represent the Medical Corps of the Army and Navy will be quite in sympathy with helping in securing needed supplies for these institutions from our surplus property in this area.

It was very gratifying to me to see how willingly and admirably medical officers of the Navy and the Army were cooperating with Dr. Sison and his faculty in acting as consultants in various departments of his medical school and hospital and how they were helping as they could with teaching. It is with a great deal of pride that Dr. Sison tells of the help which he has received from these volunteer workers of the Medical Corps in both services.

Three of the physicians on the faculty of the Philippines University Medical School have been granted fellowships by the Rockefeller Foundation to come to the United States to study various subjects, one in November, one in December and the other in January.

At the present time the greatest needs of both of these institutions are as follows:

1. A considerable number of all textbooks in medicine, surgery and the various other specialties are needed.

2. They need current medical journals. All are interested in medical journals and they are treasured as extremely valuable property. I happened to see on Dr. Sison's desk an issue of THE JOURNAL published in June, which he had just received.

3. The need for surgical instruments of all kinds and accessory apparatus for giving anesthesia and for the care of orthopedic patients is great. They have practically none.

4. Microscopes are needed, as already stressed.

5. X-ray apparatus for fluoroscopic work, x-ray and high voltage therapy, electrocardiographs, chemicals of all kinds for the chemical laboratory, and glassware of all kinds are needed. As a matter of fact the need is great for all supplies to equip a modern hospital.

I am convinced that the American Medical Association can be most helpful to these people by stressing their needs to the profession in this country and through the Surgeon General of the Navy and the Surgeon General of the Army to request that any surplus property not being used for our hospitals at Manila be disposed of through the proper agency to the civilian hospitals in the Philippine Islands and to the University of the Philippines.

To say that there is a tremendous need for physicians in all of the islands of the Philippines to take care of the civilian population is expressing mildly a situation which demands the greatest attention. It requires not only an increase in numbers of doctors but an increase in quality. What has already been accomplished in these localities by the Medical Corps of the Navy and the Army is remarkable, but from our observation we have only scratched the surface of this situation. The Department of Public Health, which is functioning now, is going to need a great deal of help, and until there is better hygiene and better sanitation there will never be better health, and this comes about, as you know, through education of the population as well as better education of physicians.

I hope that this short report will furnish you with a sufficient amount of information to cause the Board of Trustees of the American Medical Association to take the proper steps in helping to accomplish some of the immediate needs of these institutions and of these peoples.

It is believed that most of the activities of the Philippine Medical Association will revolve about the university until communications are better established.

The Board of Trustees has arranged to provide subscriptions to the medical periodicals published by the Association and to send other medical literature thus available to the Philippine Medical Association and to the University Medical School and Hospital. The Board feels that this matter is of sufficient importance to be brought to the attention of the House of Delegates with the suggestion that it urge the United States Public Health Service and the chief of the Federal Security Agency to transfer some of the supplies and medical equipment in the Philippines to the Philippine Medical Association and the University Medical School and Hospital.

7. A Plan Whereby Medical Students of Approved Medical Schools Can Become Student Members of the American Medical Association

The Board of Trustees gave consideration to the suggestion adopted by the House of Delegates in 1944 on the recommendation of the Council on Medical Service and Public Relations directing the Board of Trustees to work out a plan whereby students in approved medical schools can become student members of the Association and to prepare the necessary change in the Constitution and By-Laws for submission to the House of Delegates in order to accomplish this purpose.

The Board appointed a committee to draw up resolutions on the subject, which, after approval by the Board, were referred to the Judicial Council.

The Judicial Council made a report to the Board, which then referred the matter back to the Council on Medical Service and Public Relations. That Council at its meeting on Saturday of last week voted to suggest to the House of Delegates that it request state associations to work out the problem on a state level by making possible affiliation with state associations and county societies on an informal basis.

The report from the Judicial Council reads:

Report from Judicial Council on Plan Whereby Medical Students in Approved Medical Schools Can Become Student Members of American Medical Association

The recommendation in the report of the Council on Medical Service and Public Relations requesting "the Board of Trustees to work out a plan whereby students in approved medical schools can become student members of the Association and that the Board prepare the necessary changes in the Constitution and By-Laws for submission to the House in order to accomplish this" and referred by the Board of Trustees to the Judicial Council was considered by that body at a meeting held in Chicago on Dec. 1, 1944. Drs. Donaldson, Noland, O'Shea and Cunniffe were present.

The Council in its report explains the desire for this new membership "so that the students may be inculcated with the ideals and ethics of medicine as early as possible." The suggestion by the reference committee is that this new membership be limited to students in their clinical (third and fourth) years.

At present many county societies have intern members who are not affiliated with the American Medical Association. They attend meetings of the medical society, hear discussions, take part in the activities of the society, learn the advantage of attending these meetings for the acquisition of additional scientific knowledge and see the practical application of the Principles of Medical Ethics of the American Medical Association and the rules of conduct of the constituent association. These can best be learned, it seems to us, in the county society. A membership such as proposed in the American Medical Association, without membership in the county society, would provide members with but one advantage which might possibly help in attaining the end desired by the Council. Medical students now have the same privilege of subscribing to The Journal as other members, and from The Journal it is very possible that they would profit in such a manner that it would be worth while both to them and to the medical profession.

It might be well to consider that, although the American Medical Association has no power to control the selection of its members by component societies, yet much might be accomplished by explaining to these county organizations the value of receiving into organized medicine the students in their clinical years.

These memberships would be local, but the students could best be inculcated with the ideals and principles of ethics and with some of the problems they will be compelled to meet in the practice of medicine. This is the only place, we feel, that this can well be done; and a request to our constituent associations to urge the county societies in whose territory is located a medical school or schools to found such a membership may accomplish a great deal. The state of Connecticut has already begun a movement to have the county societies recognize such membership. These students would not be members of the American Medical Association, for it is necessary to hold a degree of Doctor of Medicine or its equivalent in medicine to be eligible for membership in the American Medical Association. This provision was adopted as part of our Constitution and By-Laws only a few years ago, to be continued as it has been from inception to the present time, a society of graduate physicians. Some component societies accepted as members some of the practicing cultists in a state wherein that cult was legalized. We have no power to compel the component societies to accept or refuse membership, but we can refuse to accept their members who do not meet our requirements as members of the American Medical Association. This proposed recommendation from the Council would compel us to change our Constitution and By-Laws to admit members who are not physicians and thereby change very greatly the character of our Association. Some of these might never become physicians but might practice one of the various cults and could then advertise as a former member of our Association. We believe the least that must be demanded for membership is the successful completion of the recognized medical course.

Members of the American Medical Association, under the present Constitution and By-Laws, are members of constituent state and territorial medical associations, and members of constituent associations are first members of component county or district medical societies. To amend the Constitution and By-Laws of the American Medical Association so as to make it possible to take in medical students as members would be a drastic measure that would in effect upset the whole plan of medical organization in the United States as represented by component county or district societies, constituent state and territorial associations and the American Medical Association. We believe that even if it should be desirable to take medical students who have not graduated into membership in the American Medical Association, such action could not reasonably be taken in a manner that would ignore the component and constituent associations.

As the result desired by the Council can in this instance, we believe, be accomplished by the means herein suggested, we feel that the Constitution and By-Laws should not be amended. However, we heartily endorse the feeling that the result visualized by the Council is the early inculcation of medical students with the ideals and ethics of medicine and we should strive to gain this end. We feel it can be brought about through special memberships in the component societies as described herein. We believe this should be accomplished without amending the Constitution and By-Laws.

This opinion was concurred in by all members of the Council.

8. Resolution Regarding Admission of Members of Medical Staff of Veterans Administration to Fellowship in Association

The resolutions proposing amendments to the Constitution and By-Laws referring to the granting of Fellowship to medical officers of the veterans' facilities, which were referred to the Board of Trustees last year, were given consideration by the Board and were referred by it to the Judicial Council. That Council submitted a report to the Board which the Board now wishes to refer to the House of Delegates with the suggestion that in view of the probable reorganization of the Veterans Administration it would not seem wise to adopt any new policy until that reorganization has been effected except as far as the local societies may take action with respect to these physicians.

Report from Judicial Council on Resolution Regarding Admission of Members of Medical Staff of Veterans Administration to Fellowship in Association

The resolution proposing amendments to the Constitution and By-Laws referring to Fellowship for medical officers of the veterans' facilities, introduced by Dr. A. W. Adson in the House of Delegates at the 1944 session and referred by the Board of Trustees to the Judicial Council, was considered by that body at a meeting held in Chicago on Dec. 1, 1944. Drs. Donaldson, Noland, O'Shea and Cunniffe were present.

This resolution requests the American Medical Association to amend its Constitution and By-Laws for the following reasons:

1. To restore Fellowship to members of the veterans' facilities who have been reassigned in states where they hold no licensure

and thus are unable to transfer membership and have lost their membership in the constituent association.

2. To restore Fellowship to those who lost membership in county and state associations through transfers without maintaining their original county and state membership.

3. This resolution also states that a loss of membership in county and state medical associations automatically deprives medical officers of the veterans' facilities of membership and Fellowship in the American Medical Association.

According to the Constitution and By-Laws, a medical officer of the veterans' facilities holding membership in any constituent association can retain that membership when transferred to a different state with the proviso that he does not engage in the private practice of medicine. This allows him to retain his Fellowship through membership in his original state association. A member of the veterans' facilities working on a part time basis must have licensure in that state and therefore must affiliate with a county society within the period of one year or lose his membership. This resolution does not apply to this class but is a petition that we amend the Constitution and By-Laws of the American Medical Association in order to restore Fellowship to those members who have lost it either through carelessness, lack of interest or knowledge of the Constitution.

The second is a request that the members of the veterans' facilities be accepted as members and Fellows of the American Medical Association under the same conditions as pertain to the officers of the Army, Navy and Public Health Service.

There are some disadvantages connected with a membership in the American Medical Association when such membership has no affiliation with the county society. These members are prone not to attend local meetings and may not understand or sympathize with the problems confronting members of that body in the general practice of medicine. They are more likely not to have an awareness of the policies that are currently adopted by the American Medical Association and in general are not acquainted with the activities of organized medicine in the state and county. They are not under the control or guidance of the county society and, we believe, it is generally admitted that the attendance of county society meetings is one of the best means not only of deriving scientific education but also of keeping informed of proposed or accepted economic activities.

It is alleged that medical officers of the veterans' facilities were chosen in a rather haphazard manner in the beginning, many owing their appointments to political recommendations. It may be that considerable improvement has been made in the method of selection; however, at present there is no qualifying examination necessary for appointment and while something has been accomplished to augment the medical training there is no comparison with that provided for those members in the Army, Navy and Public Health Service, where postgraduate courses and successive examinations are demanded of their officers. There is therefore no similarity between the standards required by the veterans' facilities and the Army and Navy medical services. One is qualified by examination and its members are compelled to take special training, postgraduate courses and successive examinations, all of which does not hold true in the veterans' facilities.

The first part of the resolution, which is predicated on the assumption that Fellows of the American Medical Association automatically lose their membership and Fellowship when transferred to a different state, is not supported by the Constitution, which permits them to retain their membership and Fellowship through their original constituent association.

The second request for a change of the Constitution and By-Laws to permit members of the veterans' facilities to become Fellows under the conditions enjoyed by the Army, Navy and Public Health Service was considered at length by the Council. It was felt that, since the same conditions and requirements are not demanded for admission to their respective services, appointments are made without examinations and without postgraduate education, and the standards required of medical officers are so much easier than those of the Army, Navy and Public Health Service, we do not find sufficient merit to warrant a change in the Constitution and By-Laws of the Association.

The members of the Judicial Council were unanimous in the recommendation to the Board of Trustees that this resolution be not supported.

9. CELEBRATION OF CENTENNIAL OF ASSOCIATION

The Board of Trustees wishes to remind the House of Delegates that the one hundredth anniversary of the founding of the Association occurs in 1947 and that plans are under consideration for celebrating that occasion during the annual session in Atlantic City. Meantime a history of the American Medical Association is in process of development and it is proposed to begin its publication in 1946 so that it will be completed in time to permit publication of the complete work for distribution at the time of the Atlantic City session.

The Board would suggest that the House of Delegates authorize the Speaker to appoint a committee to work with the Board of Trustees in the development of a program for the celebration of the Centennial in Atlantic City.

LEGISLATION

A bill, H. R. 4717, proposes to establish a Department of Medicine and Surgery in the Veterans Administration. This bill in its present form provides, among other things, that the chief medical director and the deputy medical director shall be qualified doctors of medicine and that any other person to be eligible for appointment in the medical service of the department of medicine and surgery must be a citizen and must "hold the degree of doctor of medicine or of doctor of osteopathy from a college or university approved by the Administrator, have completed an internship satisfactory to the Administrator and be licensed to practice medicine, surgery or osteopathy in one of the states or territories of the United States or in the District of Columbia."

The Board brings this bill to the attention of the House of Delegates in the hope that definite action will be taken to reaffirm policies already established or to establish new policies.

The Board would call attention to the President's message to the Congress, which includes a health program and which has been introduced with the Wagner bill. This is a matter which the Board feels should be given serious consideration.

The Speaker referred sections 2, 3, 4 and 9 to the Reference Committee on Reports of Board of Trustees and Secretary, sections 5 and 10 to the Reference Committee on Legislation and Public Relations, sections 7 and 8 to the Reference Committee on Amendments to the Constitution and By-Laws, and section 6 to the Reference Committee on Postwar Planning.

Treasurer's Report

The Speaker referred the Report of the Treasurer as printed in the Handbook to the Reference Committee on Reports of Board of Trustees and Secretary.

Report of Judicial Council

Dr. Edward R. Cunniffe, Chairman, presented the Report of the Judicial Council as printed in the Handbook, which was referred to the Reference Committee on Amendments to the Constitution and By-Laws.

Report of Council on Medical Education and Hospitals

Dr. Ray Lyman Wilbur, Chairman, presented the report of the Council on Medical Education and Hospitals as printed in the Handbook and the following supplementary report, all of which was referred to the Reference Committee on Medical Education:

Supplementary Report of Council on Medical Education and Hospitals

The Council is in full accord with the statement adopted by the Committee on Postwar Medical Service regarding the report of Vannevar Bush to the President on a program for postwar scientific research. This report was published in THE JOURNAL, October 6, pages 466 and 467, and concludes that the Bush report should be supported, subject to certain qualifications set forth, and that "the various agencies represented in the Committee on Postwar Medical Service give consideration to the contents of the subcommittee's report in their public pronouncements and in congressional hearings in which they might be invited to participate and that consideration of proposals and legislation for new federal programs to assist in medical research within restricted areas or specialties of medicine should be delayed until the establishment of some such comprehensive program as that proposed in the Bush report covering all the fields of medicine and natural sciences."

The Council is of the opinion that legislation following the Bush recommendations would be far superior to those of section 213 (pp. 63-65) of Senate Bill 1606 providing for "grants-in-aid for Medical Education, Research and Prevention of Disease and Disability." The provisions of section 213 lack clarity and are unsound. The Bush recommendations are especially superior to the provisions of section 213 in the plan for the establishment and organization of the National Research Foundation.

Respectfully submitted,

RAY LYMAN WILBUR, Chairman.
H. G. WEISKOTTEN.
REGINALD FITZ.
HARVEY B. STONE.
CHARLES GORDON HEYD.
RUSSELL L. HADEN.
JOHN H. MUSSER.
VICTOR JOHNSON, Secretary.

Report of Council on Scientific Assembly

Dr. A. A. Walker, Chairman, presented the report of the Council on Scientific Assembly as printed in the Handbook, which was referred to the Reference Committee on Sections and Section Work, and the following supplementary report, which was referred to the Reference Committee on Amendments to the Constitution and By-Laws:

Supplementary Report of Council on Scientific Assembly

To the Members of the House of Delegates of the American Medical Association:

The Council on Scientific Assembly recommends amendment to the By-Laws of the American Medical Association dealing with the scientific sections as follows:

Change the word "first" in the second line and the word "final" in the third line of section 3, chapter XV, to read "last" and "second" respectively, and delete the last two lines of that section, so that section 3, chapter XV, will read:

SEC. 3. ELECTION OF OFFICERS.—The election of officers of the several sections shall be the last order of business of the second meeting of the section at each Scientific Assembly. To participate in the election of any section a Fellow must have indicated on registering that he desires to affiliate with such section.

Change section 4 (*a*) of chapter XV by deleting the words "and shall see that proper arrangements are made for his section at the Scientific Assembly," so that section 4 (*a*) will read:

SEC. 4. DUTIES OF SECTION OFFICERS.—(*a*) Chairman.—The chairman shall preside at the meetings of the section and shall perform such duties as usually belong to such an office, or as may be provided by the by-laws of the section. He shall cooperate with the secretary in arranging the program.

Change the first three lines of section 4 (*c*), chapter XV, to read:

(*c*) The secretary of the section, with the aid of the Secretary of the American Medical Association, shall provide for meetings of the section.

Change the word "thirty-five" in the fourth line of section 10, chapter XV, to the word "sixty," so that the first four lines of section 10, chapter XV, will read:

SEC. 10. TIME AT WHICH TITLES MUST BE IN.—Titles of papers to be presented to the section must be in the hands of the secretary of the section at least sixty days before the first day of the

Change section 15 of chapter XV of the By-Laws to be section 16, and insert as new section 15 the following:

SEC. 15. PRESENTATION OF RESOLUTIONS.—No resolution shall be presented before any section later than noon on the second day of the annual session.

Respectfully submitted.

A. A. WALKER, Chairman.
FREDERICK A. COLLER.
CLYDE L. CUMMER.
EDWARD L. BORTZ.
CHARLES H. PHIFER.
ROGER I. LEE, President-Elect.
MORRIS FISHBEIN, Editor, THE JOURNAL.
OLIN WEST, Secretary.
} Ex officio.

Report of Council on Medical Service and Public Relations

Dr. E. J. McCormick, Chairman, presented the report of the Council on Medical Service and Public Relations as printed in the Handbook, which was referred to the Reference Committee on Legislation and Public Relations except the portion of the report referring to amendments to the Constitution and By-Laws, which was referred to the Reference Committee on Amendments to the Constitution and By-Laws. The supplementary report presented by Dr. McCormick was referred to the Reference Committee on Postwar Planning except that portion which concerns postgraduate medical education in hospitals, which was referred to the Reference Committee on Medical Education:

Supplementary Report of Council on Medical Service and Public Relations

REPORT ON THE SECTION ON PLACEMENT OF MEDICAL OFFICERS

Whereas, the Conference on Public Relations held October 19 and 20 made the following recommendations in regard to the placement of medical officers:

Intern Resident Policy: "It is recommended that the American Medical Association request the Procurement and Assignment Service and the Navy, Army and the Public Health Service to ascertain at the earliest practicable time the future policy relating to the deferment of medical officers to serve as residents in order that hospitals may know the extent to which they may offer additional opportunities to returning veterans to serve as residents."

(This has already been accomplished since the recommendation was made.)

Payments Under Public Law 346: "It is recommended that all discharged medical officers be given terminal leave pay at the termination of their active duty and prior to the expiration of such accrued leave as they may have, thus enabling them to participate immediately in the benefits provided by Public law 346 (78th Congress, G. I. Bill of Rights). Such a procedure will enable the returned medical officer to commence immediately his training in hospitals or medical schools after leaving the armed services."

Approved Hospital Residencies: "It is recommended that the Council on Medical Education and Hospitals be urged to set up at once a method for the more prompt approval of hospitals for residencies and consider the advisability of giving some temporary approval until formal inspections can be made." The Council on Medical Education and Hospitals and the Specialty Boards are now exploring these possibilities.

The Bureau of Information: "The Bureau of Information of the American Medical Association should be established in a permanent form and maintain adequate records of each physician in the United States from which county and state medical societies could obtain information. The Bureau of Information should also, by the establishment of a cooperative monthly reporting system with state societies, be kept informed of areas needing physicians and from time to time seek information either directly or through state medical societies from individual physicians concerning location, type of practice and other relative data.

"Each state medical society should be urged to establish an information service. This state information service should collect from various public and private agencies data relating to medical facilities, medical personnel or medical needs and other information concerning medical care within the state. This information service should at all times be in a position to furnish information concerning areas in need of physicians and a complete picture of the medical facilities and the physical and economic aspects of any community within the state.

"The American Medical Association should be urged to provide advice or service to such state information services relating to methods of organization and procedure and aid the state services in developing a usefulness to the medical profession and to the people of their states."

Therefore, the Council on Medical Service and Public Relations recommends that the House of Delegates approve these proposals.

Dr. McCormick asked that members of this Council be permitted to introduce resolutions that came from the public relations conference held a short time ago, but the House recessed for luncheon at 1:20 p. m. to reconvene at 3 p. m.

Monday Afternoon, December 3

The House of Delegates reconvened at 3 p. m. and was called to order by the Speaker, Dr. H. H. Shoulders.

Supplementary Report of Council on Medical Service and Public Relations

Dr. E. J. McCormick, Chairman, stated that each chairman of a round table conference held at the Council's conference on October 19 and 20 would like to introduce a report of his conference.

1. Dr. A. W. Adson, Minnesota, presented the following report, which was referred to the Reference Committee on Legislation and Public Relations:

REPORT OF THE SPECIAL COMMITTEE OF THE CONFERENCE ON VOLUNTARY PREPAYMENT MEDICAL CARE PLANS

Whereas, voluntary prepaid medical care programs, sponsored and operated by the medical profession in many parts of the country, are providing the means whereby millions of persons are able to obtain good medical care and hospital service on a budgeted basis; and

Whereas, this medical care has been rendered in a manner highly satisfactory to both patient and physician; and

Whereas, there are forty-seven voluntary plans in operation in twenty-four states, with almost every other state medical society in the process of developing plans; and

Whereas, in spite of this development some areas of the country have no such programs in operation at the present time; and

Whereas, these voluntary prepayment plans are based on the intrinsic American principles of personal initiative and personal responsibility; and

Whereas, the voluntary type of prepayment plan is to be preferred, in the interest of the people's health, to compulsory care under political control; and

Whereas, a large proportion of the people desire prepayment medical care programs; therefore be it

Resolved, that the House of Delegates take immediate steps to encourage the development of a national voluntary prepayment medical care plan: for the purpose of covering areas not now served by plans, for the purpose of assisting in the enrolment in local plans of national enrolment groups and to serve until such time as all states have their own plans; and be it further

Resolved, that the American Medical Association's Council on Medical Service and Public Relations be instructed by the House of Delegates to take immediate steps to:

1. Coordinate the activities of all prepayment medical care plans now in operation.

2. Foster the development of such plans in those areas where there are none.

3. Educate physicians and the public as to the functions of voluntary prepayment plans and the need for supporting them; and be it further

Resolved, that the officers and committees of every state medical society be urged by the House of Delegates to secure prompt action by their state societies in inaugurating new or increasing the benefits of existing prepayment medical care programs in every state.

Respectfully submitted,

JAMES R. MILLER, Chairman.
A. S. BRUNK.
W. C. CHENEY.
MARTIN I. OLSEN.
JULIAN PRICE.
CARL VOHS.

2. Dr. John H. Fitzgibbon, Portland, Ore., presented the following report, which was referred to the Reference Committee on Legislation and Public Relations:

REPORT OF THE SPECIAL COMMITTEE OF THE CONFERENCE ON PUBLIC RELATIONS

The section agreed on the importance of establishing two types of public relations effort: one concerned with the members of the medical profession and various medical organizations, the other concerned with the relations of medicine to the public. The committee was agreed that thorough understanding of public relations by the medical profession is a necessary preliminary to the establishment of efficient public relations with the public and urged on the American Medical Association intensified efforts toward extending such an understanding through the state and county medical associations.

The difficulty of impressing physicians with the need that they inform themselves concerning current problems in social medicine and in medical economics lies in the fact that many physicians do not read the material coming to them through national, state or local medical publications. The proposal has been made that new technics, such as specific direct-by-mail education or more meetings designed particularly to elucidate medical economics subjects constitute a part of an extended program for medical public relations. The committee calls attention to the value of the regional meetings of the Council on Medical Service and Public Relations.

In the field of public relations for the public, attention is called to the following technics and proposals which were discussed by this section:

A. Community Health Conferences: In some areas public relations have been immensely benefited by the creation on a community basis of an organization including representatives of the medical and allied professions, the social agencies, management, labor, education and the public concerned with promoting an understanding of health problems and a discussion of the various methods by which medical service may be extended and local problems solved.

B. Radio: The section heard an extended discussion of the use of radio on a national scale by the dramatized network program, the use of prepared records in the form of drama, dialogue and prepared addresses syndicated through local stations, and the use of other radio technics. Among the problems chiefly discussed were the securing of free time as compared with paid time on the radio, the use of radio for health education and for discussion of social and political problems and the creation of special agencies for utilization of radio such as the effort now being developed in Michigan. The committee representing the section has no conclusions to offer except to point out that the use of radio for health education and for propaganda purposes is still experimental and that within certain limitations medical societies may well test the effects, in their own areas, of the various technics as well as others which they may create independently. In general, the committee feels that the purchase of time by medical societies either for health education or for informative purposes is questionable, particularly since there are definite restrictions on not-for-profit organizations having to do with funds expended for political purposes. Preferably medical programs should be educational and noncontroversial. Numerous opportunities exist whereby the point of view of medicine may be expressed on well established programs dealing with controversial subjects.

C. Press: The section heard a discussion on the press relationships of the headquarters office of the American Medical Association and also statements from other sections of the country as to the various ways in which the press is being used to educate the public regarding medical policies. These include a Texas program which involves syndication of cartoons and articles in the Texas press, a program in Arizona involving the purchase of space for health education and other material, and programs in which county societies and commercial medical agencies purchase space for informative material. Much is made of the argument that the purchase of some newspaper space creates a kindly attitude on the part of the press toward the medical profession. The committee believes

that here also local considerations must govern both the attitude toward these procedures and the funds to be expended in this manner.

D. Motion Pictures: Already some medical societies are experimenting with the use of motion pictures for health education. Thus far there do not seem to have been made available any motion pictures in the social medical field other than perhaps the "March of Time" program on medical care. The Michigan State Medical Society suggests such experimentation in the field of health education. The Walt Disney films have prospected a considerable number of pictures made with the assistance of federal agencies. In Oklahoma a program is under way for the development of two and three minute trailers on health education subjects to be circulated through all the motion picture houses in the state of Oklahoma. Through the Committee on Medical Motion Pictures of the Bureau of Exhibits of the American Medical Association measures are now being taken to extend to the medical profession and to the public the motion pictures in the field of health developed by various branches of the armed forces.

E. Bureau of Exhibits: The Bureau of Exhibits discussed the value of exhibits of various types. The committee feels that local county medical societies should become more familiar with the exhibit material and the facilities available for the extension of exhibits through the headquarters office and utilize them to the utmost. In several communities the Variety Clubs have become interested in health as their major project. In Chicago the Variety Club devotes its activities to the support of a sanatorium for rheumatic fever. In Minneapolis the Variety Club proposes to construct a building for patients with heart disease as a part of the University of Minnesota Medical School. In Oklahoma the Variety Club has established a health center and proposes to include with it a division for health education and an exhibit.

A proposal was made from Texas that both the American Medical Association and the individual state medical associations engage more liberally in the employment of professional public relations counsels with a view to utilizing such expert services as consultants for the organization of medical society public relations experiments and in various other ways. The California Medical Association utilized professional public relations counsel in analyzing the public opinion of California on medical service. A similar procedure was followed in Michigan. In Texas the state medical society has retained public relations counsel for advice in the development of its program. Several other states also have recently engaged such services. The committee representing the Section on Public Relations urges that the Board of Trustees of the American Medical Association give special consideration to the extent to which such public relations services may be utilized by the Association.

In understanding the public relations effort of medicine, the committee would call attention to the fact that it is now generally recognized that the relations of the individual physician to the individual patient in the United States are on a substantially sound basis. In other words, the public does not express, in general, resentment against the individual physician. The surveys seem to have shown that the public acceptance of the American Medical Association and its policies is favorable so far as concerns scientific progress, health education and protection of the public against inferior medicine and quackery. Antagonism of some elements of the public toward medical organizations seems to rest on the basis that opponents of organized medicine offer a specific program which promises complete medical care on what seems to be a relatively small financial outlay, whereas the medical profession has not yet come forward with a specific program for the extension of medical service on a nationwide basis with a system of payment easily available and sufficiently attractive to insure early enrolment of a large proportion of the public. The task of public relations would be rendered much easier if those concerned could be put in possession of a constructive program which they could promote to the public rather than in a position of continuous defense against programs coming from other sources.

Respectfully submitted,

A. S. Bristow.
Theodore Wiprud.
Morris Fishbein.
John H. Fitzgibbon.

3. Report of the Special Committee of the Conference on Fourteen Point Constructive Program

Dr. Louis H. Bauer, New York, presented the following report, which was referred to the Reference Committee on Legislation and Public Relations:

You recall that last June the Council on Medical Service and Public Relations and the Board of Trustees issued a fourteen point constructive program. This had considerable circulation. Some of the criticisms of it were that the interpretations were not there; just what did these points mean?

Consequently, interpretations of those fourteen points have been made and methods of implementing them have also been made. I am sorry that we do not have a reprint of this whole matter, but you were given this morning a copy of The Journal of the American Medical Association for December 1 and on page 945 you will find an article entitled "Medical Care for the American People" which covers the fourteen point program, the means of interpretation and the methods of implementation, and I shall not read that to you. It is rather long, it would take nearly a half hour to read it, but you all have it and some of you have had a chance to peruse it.

I will just comment on it briefly. We have been criticized so much because we do not have a positive program but a negative one. Now this program is positive. Of the fourteen points there is only one of them that is of a negative character. That is the one dealing with socialized medicine. We feel that the program might be rearranged and the topics classed into four different groups: The first refers to those that are primarily educational. Right here I should like to interpolate that I was greatly in sympathy with Dr. Kretschmer's remarks this morning in speaking of the county medical society. The county medical society has been waning in its influence, and I think one reason there is that we are too much overorganized in medicine. There are too many subdivisions and too many meetings and the result is that doctors neglect their county society, and if one does go to a county society meeting one is fortunate to see 10 per cent of the membership there. It is usually the same 10 per cent always in meeting after meeting.

We cannot get very far unless we can interest the members of the profession in our immediate problems and not leave them in the hands of a few like this House of Delegates and the house of delegates of our state societies.

The second group refers to those that call for positive legislation. The third group refers to those that call for positive action but not necessarily legislative action, and the fourth group refers to those that we call negative, namely pertaining to the Wagner-Murray-Dingell bill and other types of vicious legislation. On page 948 of The Journal of the American Medical Association for Dec. 1, 1945, in the interpretation of item 12 there is already a little obsolescence, although it was written less than two months ago. A new Wagner-Murray-Dingell bill has been introduced and comments appearing in The Journal are on the previous one. Most of them are still pertinent to this same bill. We have prepared an amendment to this but, as the Board of Trustees has referred the matter of the President's message and this bill to the House, which will draw up its own policy on these subjects, it did not seem wise to have two reports on the same subject. We merely suggest that whatever the House adopts in this regard be implemented into the official interpretation of this twelfth point.

I think it is very important that we have not only education of the public in making this positive program one which would be effective but that we have unity among ourselves in carrying it out. We cannot go very far if we are a house divided against itself. I feel that it is time that we cleared up the word "reactionary." The people who are opposing compulsory sickness insurance have called us reactionary. I know of nothing which is more reactionary than compulsory sickness insurance, for which there have been proposals for over thirty years in this country and the various states, and for a number of years nationally.

It is the same old proposition that dates back to Bismarck with a few new dressings added to it in the hope that it will delude the public into thinking it is something new. It is, of

all things that have been proposed for delivery of medical care, the most reactionary. I think it is time we caught them with their own stick.

Now we haye a lot of problems thrust on us, but I don't think we should adopt a defeatist attitude. I have heard doctors say "This is inevitable, we might as well get on the bandwagon and go along with it. We can't stop it." Of course we can't stop it if we take that attitude. There is a paragraph in this article on that very subject and it says that the only thing inevitable is the—I will quote: "Investigation of specific symptoms usually reveals that the only inevitable feature of the march toward collectivism is the determination of the little group which wants to collectivize."

We defeated other bills of this character and I am certain that if everybody will work together and get the profession itself as a whole interested, and not just a few, we can defeat this.

Well now, gentlemen, we have our troubles and they seem to be increasing; but if our opponents have any idea we are ready for the hospital they are due for a rude awakening.

4. Report of Special Committee of the Conference on Legislation

Dr. James R. McVay, Missouri, presented the following report, which was referred to the Reference Committee on Legislation and Public Relations:

Whereas, the Conference on Public Relations held October 19 and 20 made the following recommendations in regard to legislative matters:

"We highly commend the opening and development of the Washington office. In its first year of operation it has demonstrated its usefulness and the committee recommends its further expansion and that necessary financial support be continued.

"We further recommend that each state association be invited to appoint a special national legislative committee, consisting of at least five men composed of the president, secretary and three other members, in those states which do not now have active legislative committees. The function of this committee will be to determine the opinions and wishes of the profession and to keep the Council office and the Washington office informed of the attitude of the Senators and Congressmen from their respective states. The Council and the Washington office will in turn continue to disseminate information regarding legislative action and opinions expressed by members of Congress from various states. A two way flow of information is thus encouraged. In view of recent national legislative developments it is recommended that the House of Delegates urge intense activity of each state committee."

Therefore, the Council on Medical Service and Public Relations recommends that the House of Delegates approve these proposals.

5. Report of Special Committee of the Conference on Extension of the Emergency Maternal and Infant Care Program, Postwar

Dr. Thomas A. McGoldrick, New York, presented the following report, which was referred to the Reference Committee on Legislation and Public Relations:

The conference unanimously disapproves the present super E. M. I. C. bill, S. 1318, and calls on the members of the entire medical profession for personal disapproval.

Whereas, it has been authoritatively and repeatedly announced by the Children's Bureau that the E. M. I. C. would be completed six months after termination of the war; and

Whereas, we feel that the objects of this program have been attained, viz. to sustain "the morale of the soldier" and it has been accomplished through the cooperation of the medical profession; and

Whereas, the need of this emergency measure is rapidly diminishing in importance; and

Whereas, there is a definite move to continue this program and provide for its application to the people of the entire United States and with widened scope and expanded power centralized in the Children's Bureau (S. 1318, Pepper bill); and

Whereas, we feel this plan should not have general application throughout the United States becaues (*a*) there is no real need for the continuation and expansion of this wartime measure, (*b*) such compulsory plans are not consistent with good care, excellence of service or American principles, (*c*) because the inclusion of children to the age of 21 is not required and their medical needs can be met more efficiently in other ways and (*d*) no health work or medical service that can be rendered by a state or any of its political subdivisions should be administered or controlled by the federal government or any federal bureau; therefore be it

Resolved, that the present Medical Advisory Committee to the Children's Bureau is not truly representative of the entire medical profession.

Any program of that bureau must be administered through the state medical associations, which should be represented; and be it further

Resolved, that the present advisory and steering committees to the Children's Bureau be abolished and a new committee be established which shall consist of one representative from each state medical association to be designated by that association, and representatives from such other medical organizations as have a direct interest in the functions of the Children's Bureau selected by these organizations; and be it further

Resolved, that since the Children's Bureau is not properly related to the Department of Labor it should be transferred to the Federal Security Agency until such time as all health and medical activities of the government are segregated into a single department; and be it further

Resolved, that the fourteen point program of the American Medical Association, and such resolutions as may be adopted by this conference, be forwarded through the proper channels to the Children's Bureau and the Federal Security Agency to bring before them the policies of the profession on the medical economics of maternal and child welfare; and be it further

Resolved, that, in the distribution of any funds appropriated by the Congress for health and medical services for the use of the separate states, the state medical associations be integrated into the control of the expenditure of such funds; and be it further

Resolved, that the American Medical Association, through the proper channels, be requested to take action to present the foregoing resolutions to the proper authorities and endeavor to have them put into effect.

It is recommended that every state medical association through the members of its component societies personally place before their representatives in Congress the defects in the bill, the harm that would result from its enactment into law, the dangers resulting from compulsory central government measures and the retardation of our medical progress and also emphasize the medical policies favored and promulgated by these resolutions.

A copy of the recommendations of the general conference on the super E. M. I. C. bill, S. 1318, should be forwarded to every representative in the Congress, to the Secretary of Labor, to the Federal Security Agency and to every state and county medical society.

Report of the Committee on Postwar Medical Service

Dr. Ernest E. Irons, Chairman, presented the following report, which was referred to the Reference Committee on Postwar Planning:

At the meeting of the Board of Trustees on Feb. 18 and 19, 1943 Dr. James E. Paullin, then President-Elect of the American Medical Association, presented a plan for postwar medical service. The Board of Trustees endorsed the proposition that the American Medical Association take leadership in the matter with the cooperation of committees of the American College of Physicians and the American College of Surgeons, and a joint committee was formed. The first meeting of this joint committee was held in Chicago on June 5, 1943. It was largely exploratory, and the general objectives were discussed.

The matter came before the House of Delegates in June 1943 in the address of President-Elect Paullin and was referred to a reference committee. The reference committee reported as follows:

> Your reference committee notes with enthusiasm the formation by the Board of Trustees of the temporary Committee on Planning of Postwar Medical Service, which action it recommends be approved by the House of Delegates.
>
> Your reference committee further recommends that the Board of Trustees be instructed to make this a permanent Committee on Planning of Postwar Medical Service to cooperate and collaborate with other agencies concerned with these problems.

As the organization and scope of the committee progressed, it became evident that liaison members from a number of organizations should be added. The organizations and agencies so included are:

Advisory Board for Medical Specialties
American Dental Association
American Hospital Association
Association of American Medical Colleges
Catholic Hospital Association
Federation of State Medical Boards
War-Time Graduate Medical Meetings
Office of the Surgeon General, U. S. Army
Bureau of Medicine and Surgery, U. S. Navy
U. S. Public Health Service
Veterans Administration
War Manpower Commission
Procurement and Assignment Service
Federal Security Agency

In all, some fourteen meetings of the committee have been held, as often as matters requiring consideration came up, usually at intervals of about two months and when transportation facilities could be arranged. At each meeting representatives of official agencies of the federal government immediately concerned with the prosecution of the war have been present.

Dr. Roger I. Lee, who was responsible for the early meetings of the committee and accomplished its organization, was obliged to resign on account of the press of new duties, and the present chairman was appointed by the committee.

Many questions have been referred to the committee, and a number of these have been made the subject of special reports by subcommittees. The proceedings of the committee have been regularly published in THE JOURNAL, as follows:

Sept. 25, 1943, p. 221
Oct. 30, 1943, p. 574
Feb. 12, 1944, p. 447
March 18, 1944, p. 784
May 13, 1944, p. 157
July 8, 1944, p. 726
Sept. 23, 1944, p. 243
Dec. 16, 1944, p. 1036
Jan. 13, 1945, p. 107
March 17, 1945, p. 658
May 12, 1945, p. 138
June 16, 1945, p. 523
Aug. 4, 1945, p. 1033
Nov. 17, 1945, p. 812

At the outset, it was recognized by the committee that any decisions or pronouncements which it might make could be advisory only. However, it is believed that many of the committee's reports and actions have been helpful to physicians in the armed services and also of value to the armed forces themselves in the prosecution of the war and in preparing for the peace to follow. Surprise has sometimes been expressed that the mere reference of a problem to the committee did not at once result in a complete solution. As already noted, by the very nature of its organization the Committee on Postwar Medical Service could be advisory only but could, by collecting all of the information on any one subject, bring the combination of the facts to a focus which would contribute to a sensible solution. While the work of the committee has been of distinct service in many situations, the committee is keenly aware that it has not always been able to effect solutions of problems entirely satisfactory to their proponents. The committee has been guided throughout its work by the principle of service to physicians, both military and civilian, to the prosecution of the war and to the welfare of the civilian population.

The following are some of the problems handled by the committee.

Through the efforts of a subcommittee and the efficient help of Lieut. Col. Harold C. Lueth, liaison officer, pilot questionnaires were sent in the early part of 1944 to 3,000 medical officers and, when returns had been studied, a revised questionnaire was sent to each medical officer on active duty with the Army, Navy, Public Health Service and Veterans Administration. Reports on the analysis of 21,029 returned questionnaires were published in THE JOURNAL: "Results of Pilot Questionnaire to Physicians in Service," June 24, 1944, p. 558; "Future Educational Objectives of Medical Officers," Aug. 19, 1944, p. 1099; "Postgraduate Wishes of Medical Officers," March 31, 1945, p. 759; "The Medical Officer Returns to Civilian Practice," April 21, 1945, p. 127.

One of the most important activities sponsored by the committee is the establishment by the Board of Trustees on authorization of the House of Delegates of a Bureau of Information in the headquarters offices of the American Medical Association. Lieutenant Colonel Lueth aided greatly in the setting up of the Bureau and in defining and organizing the scope of its work. The aims of the Bureau are to provide veteran medical officers with information concerning educational opportunities, state licensure and medical, social, financial, economic and other phases of community life that will enable them to make a selection of a location in which to practice medicine. The Bureau is not meant to be a placement or employment agency. After returning physicians have been given all available information by the Bureau, they are referred to state, county and local medical society committees. Various methods for obtaining and making use of all pertinent data have been devised. The committee is keenly appreciative of the assistance given by state and county societies and by state boards of procurement and assignment. Constantly increasing numbers of returning medical officers are making use of the facilities of the Bureau. An article entitled, "The Bureau of Information, Its Function and Operation," appeared in THE JOURNAL for Jan. 6, 1945. An Information Bulletin for Medical Officers was prepared by the Bureau of Information and was distributed very widely in the late summer of this year. Lieut. Col. Robert D. Bickel, who succeeded Lieutenant Colonel Lueth as liaison officer, was extremely helpful in the conduct of the Bureau.

The Subcommittee on Graduate Education of Physician Veterans had a number of conferences with various officials of the Veterans Administration. A report of this subcommittee appeared in THE JOURNAL for Nov. 11, 1944.

The matter of the supply of medical and premedical students received the earnest consideration of the committee, and the Subcommittee on Enrolment of Medical Students has held many conferences with officials in Washington and is still working on the problem. A report was published in THE JOURNAL for April 7, 1945.

A problem of grave concern to all medical officers in the armed forces arose early in 1945 in that a number of such officers were transferred by presidential directive to service with the Veterans Administration without regard to their own wishes in the matter. The Committee on Postwar Medical Service at its meeting on May 12 adopted a strong statement deprecating this practice, which was forwarded to the appropriate government officials.

The Subcommittee on Surplus Medical and Hospital Supplies has been active, and its reports have appeared in THE JOURNAL from time to time as a part of the proceedings of the committee.

The matter of state licensure for physician veterans has been given serious attention at many meetings of the committee. The minutes of the meeting held on Sept. 22, 1945, contain a report on this problem.

The demobilization of medical officers was the subject of study by the Subcommittee on Formulation of Lists of Medical Officers to Be Considered for Demobilization.

Pursuant to the enactment of the so-called G. I. Bill of Rights, a subcommittee was appointed to draw up recommendations to the governors of the states concerning medical education and postgraduate training under the G. I. bill, and subsequently a letter was sent to the governor of each state, territory and the District of Columbia setting forth the committee's ideas and recommendations, with a view to preventing the exploitation of veterans by unqualified and cultist schools. The response

of the various governors was cordial and favorable. A report of the Subcommittee on Graduate Education of Physician Veterans, in which rights of the physician under the G. I. bill are set forth, appeared in THE JOURNAL for June 16, 1945, and another in THE JOURNAL for August 4.

A report of the Subcommittee on Establishment of a Medical Corps in the Veterans Administration appeared in the proceedings of the committee printed in THE JOURNAL for May 12, 1945. Since this report was submitted a program for reorganization of the Veterans Administration has been inaugurated and at the time of writing of this report a new bill (H. R. 4225) has been introduced by Representative Rankin. The Committee on Postwar Medical Service is favorably impressed with many of the provisions of the Rankin Bill.

The Vannevar Bush report advocating the establishment of a National Research Foundation by the federal government has been considered by the committee, which adopted a report of a subcommittee recommending, subject to certain qualifications, that the Bush report receive the support of the Committee on Postwar Medical Service, and that consideration of proposals and of legislation for new federal programs to assist in medical research within restricted areas or specialties of medicine be delayed until the establishment of some such comprehensive program as that proposed in the Bush report covering all fields of medicine and natural sciences. The report of the subcommittee was published in THE JOURNAL for Oct. 6, 1945.

The Committee on Postwar Medical Service is much interested in plans for aiding returning medical officers that are being or may be promulgated by local or state medical societies. It also is concerned over what may be done to alleviate the plight of the medical profession and of medical education in the Philippines.

The committee is continuing its consideration of uncompleted problems and will take up new ones as they arise.

Respectfully submitted for the committee.

ARTHUR W. ALLEN, Vice Chairman.
ERNEST E. IRONS, Chairman.
H. H. SHOULDERS, Secretary.

IRVIN ABELL
FRANCIS G. BLAKE
EDWARD L. BORTZ
FREDERICK A. COLLER
WARREN F. DRAPER
WILLIAM E. EATON
MORRIS FISHBEIN
EVARTS A. GRAHAM
E. L. HENDERSON
JAMES M. MASON
WALTER W. PALMER
JAMES E. PAULLIN
GEORGE MORRIS PIERSOL
FRED W. RANKIN
LEROY H. SLOAN
BARRY C. SMITH
OLIN WEST

AND LIAISON MEMBERS:

WALTER L. BIERRING
FRANCIS F. BORZELL
C. WILLARD CAMALIER
GRAHAM L. DAVIS
VICTOR JOHNSON
B. R. KIRKLIN
HUGO MELLA
F. V. MERIWETHER
A. M. SCHWITALLA
MARY SWITZER
R. C. WILLIAMS
FRED C. ZAPFFE

Report of Committee on Rural Medical Service

Dr. F. S. Crockett, Chairman, presented the following report, which was referred to the Reference Committee on Legislation and Public Relations:

The Committee on Rural Medical Service was created by the Board of Trustees last June following an invitation to confer with a like committee of the American Farm Bureau Federation. The Associated Women of the American Farm Bureau Federation represent some 850,000 farm families, comprising initially the membership of the American Farm Bureau Federation. Its interest in the health problems of farm families and farm communities has been active for some time.

The importance of cooperation with farm groups in health matters, in the opinion of the Board of Trustees, was amply demonstrated by those appointed with me: Dr. C. W. Roberts of the Board of Trustees, Dr. E. J. McCormick, Chairman of the Council on Medical Service and Public Relations; Dr. Victor Johnson, Secretary of the Council on Medical Education and Hospitals, and Dr. Olin West, Secretary and General Manager of the American Medical Association. Later, Dr. L. W. Larson, secretary of the North Dakota State Medical Association was added for his familiarity with rural conditions in the Northwest. It is hoped to find others with similar special knowledge of other agricultural sections, who can contribute much in finding a solution for existing medical problems.

From 1936 to 1938 the Committee on Legislative Activities met on several occasions with the Associated Women of the Farm Bureau to consider this same subject of rural medical service. As a result of these meetings we have all learned much.

In July this year your committee met with the Rural Health Committee of the Farm Bureau as their guests. The current rural health situation was reviewed. The growing scarcity of physicians in farm communities is producing a situation that creates alarm among those living in these areas. The reluctance of young physicians to seek locations in the smaller communities, at a distance from good hospital facilities, as well as the advancing age of those now so located, was cited as reason for this concern. This is not a local situation but exists in nearly all states of the Union.

The Hill-Burton bill was favored especially in its possible effect on rural practice. It seemed reasonable to believe that the development in rural communities of centers where diagnostic aids together with public health and other kindred activities could be housed, would attract well trained physicians. It seems quite possible that federal legislation of this kind could be instrumental in improving the quality of medical practice in rural America without placing the profession in a legislative strait jacket.

The Farm Bureau is opposed to federal health legislation of a compulsory type and has appeared to testify against such pending legislation in the Senate.

With the one exception of the Farmers Union, all farm groups have adopted a constructive attitude toward and have registered themselves opposed to compulsory socialized medicine. The nature of their work and the semi-isolation of their living develops them as self-confident individualists, impatient with restraint or limitation of their freedom. We as a medical profession have many things in common with them, many areas of agreement, of approval as well as disapproval where federal legislation is proposed. They are our natural allies in the fight to preserve this nation from regimentation, and it is to our mutual advantage that we work in close harmony.

In the July meeting with the Farm Bureau, our discovery of parallel points of view on health problems made it desirable to take full advantage of cooperation at all levels. The American Farm Bureau, like our American Medical Association, is not organized to work on a state or county level. That must be done by state farm bureaus and county farm bureaus. It was agreed that both organizations would invite the component state groups to appoint rural health committees to cooperate in the exploration and solution of local health problems.

In furtherance of this plan, your committee has written all state associations asking appointment of rural health committees. To date, committees have been appointed and reported to us by twenty-five states. These committees have been created in response to an appeal for help from the Farm Bureau, and the Grange with all interested farm and community groups should enter this activity. The need is very urgent and calls for action now.

While it is recognized that every one in the community must contribute his full share in any plan, we, as the medical profession, are expected to supply many of the answers in the solution of this problem. It might appear that the supplying of well qualified physicians and adequate hospital facilities would be sufficient, but this would not be a complete answer. As consonant with and in development of point number one of the fourteen point program for medical care, as applied to rural America, we also need the building of suitable habitations providing protection from cold and moisture and with proper plumbing, as many rural houses are not fit to live in; clothing

appropriate for the protection of the individual; balanced diets suitable for the promotion of healthy growth in the young and maintenance of vigorous bodies in the mature, and a knowledge of better living habits, including instruction for expectant mothers, infant care and the home management of common ailments and first aid. All these add up to the need of widespread health education and appreciation which is the duty of the individual to learn if the presence of a physician in the community is to have full effect.

As the individual has his evident duties in this plan, so has the community through provision of qualified public health administration.

The value of all the foregoing may be included under the general term of health education. If the citizens have it, all is well; but if they do not have it or will not learn it the presence of the best trained physician is only partly effective.

Prepayment plans for medical care and for hospitalization have the approval of many farm groups; however, some of them feel that such plans should be consumer operated. Such plans should be made available to farm groups as early as experience permits.

The place of the marginal farmer in prepayment plans has been given much thought and discussion. He is presented as above the indigent but below the level of those able to join a prepay group.

He should be classed as medically indigent and cared for by taxation, but this term gives offense and must not be used, which all makes the situation very difficult.

This marginal farmer needs help, he wants help but he cannot pay for it. He refuses what he considers charity at the hands of the taxpayer but complains of hardship and inequity when he fails to receive care. It is difficult to know how this has been met in the past, but evidently some doctor has given the service, a kind of charity that has no sting to it for the recipient. The $30 to $50 premium may be too much for those with an annual income under $1,000, though it would be interesting to know what is purchased with what they earn. It is possible that some plan for supplementing part payments with tax money could be devised.

A number of states, notably North Dakota, Virginia and Georgia, have sought through surveys of rural health needs to meet the long recognized problem of increasing shortage of professional personnel.

In Virginia a committee has been working on this subject since 1941. "They have advocated twenty set scholarships per year, in the two state supported medical schools to individuals who practice for a period of four years in rural areas." Pointing to the advantages of so-called health centers, the legislature is urged to appropriate $360,000 to establish six such centers in communities for experimental purposes. (Letter from Dr. Mulholland.)

In North Dakota an extensive survey of medical, dental, hospital, ambulance, x-ray and public health facilities revealed a shortage of physicians in many rural areas. Three counties have no physicians and in many other parts a corresponding lack of hospital and public health facilities. The Farmers Union is sponsoring development of a cooperative health center which will employ physicians on a full time basis and members will receive complete medical and hospital coverage. Considerable experience may be gained from this and other efforts promoted by consumers of medical service. (Report of Dr. Larson.)

Georgia has published a "Public Health Program" for the state, prepared by the Health Panel of the Agricultural and Industrial Development Board. This is a most extensive and complete survey covering the period 1940-1944. It would seem to supply the information on which an immediate and long term plan can be based. This covers urban as well as rural needs. Since Georgia suffers from too few doctors not equitably distributed, the report sought to discover the reason. They concluded "First and most important is the lack of hospital, x-ray equipment and laboratories within easy distance of rural communities." Five types of service are proposed: health centers, shelter health centers, general hospitals, medical centers and tuberculosis hospitals. Health centers would house medical, dental and public health personnel and be equipped with a small laboratory and fluoroscope, and shelter health centers, a larger unit located in county seats equipped as health centers and with the addition of an emergency and obstetric bed capacity equal to 1 or 1.5 beds per thousand, which, in addition to general hospitals strategically located, would give the doctor in rural areas the diagnostic aids he might have in more favored areas.

It is patently impossible to expect all communities to view their health needs with equal earnestness and foresight. It was recognized by the Farm Bureau as peculiarly their duty to educate their public in the desirability of health information and cooperation in health programs.

It would seem to be our privilege to set up the minimum elements within the framework of satisfactory rural practice. It is recognized that the social environment is an important factor, as is the opportunity to earn a satisfactory income. Assuming that these conditions are met, the rural practitioner should have available the diagnostic facilities and opportunity for consultation enjoyed by those near well equipped hospitals.

The construction by the people of a building wherein may be housed a clinical laboratory, x-ray, the full time public health office with adequate nursing staff, public health supervision, immunization, communicable disease control, control of food handlers, eating places, tourist and vacation camps, sewage disposal and other public health activities and where doctors' offices and dental offices might be housed would go far in placing the practice of medicine in rural communities on a satisfactory level.

This brief report of activity in a few states, pointing to the urgent need for some solution and sketching in general the outline of the conditions that should exist in rural areas for satisfactory professional activities, calls for a corresponding analysis of the plans, the hopes and the desires of the returning medical veteran. This is known only in part. Mention should be made of the valuable work of the Bureau of Information of the American Medical Association. Through cooperation with state societies, complete current information is compiled covering areas needing doctors. This covers "data relating to medical facilities, medical personnel and medical needs and other information concerning medical care within each state, together with the physical and economic aspects of any community in question." This information is made available to inquiring medical officers returning from service. The report cites since V-J day over 2,000 such inquiries. It is interesting to learn that a number prefer country to city locations. Unfortunately, the completeness of this record is hampered by failure of some state associations to cooperate. The integration of this information with the committees of the Farm Bureau and other rural groups should go far in placing doctors. The placing of physicians, however, cannot be considered as completing the job. Some way must be found to establish the facilities needed to keep them there.

In a recent letter Dr. Charles R. Bird, chairman, Procurement and Assignment Service for Indiana, states what may be true generally, that "of the 300 Indiana doctors released, comparatively few ease the situation in stringent areas. . . . Almost universally they inquire about towns of 20,000 to 50,000 population . . . and always demand a town with ample hospital and laboratory facilities. . . . Many of our small communities formerly with one, two or three doctors, now have none or, perhaps, one beyond the age of efficiency."

President Truman, in his recent message to Congress, stressed the inequity of distribution of doctors and of hospital and other health facilities to the great disadvantage of rural areas. He stressed, however, that those served must be able to pay for the service. Since there are places unable to meet this ability test, he proposed to create a pool of tax money on a national scale to assure the creation and maintenance of adequate facilities and supply the financial resources to give the professional personnel pay comparable to that to be had in other places. As he pointed out, these returning veterans cannot be assigned, they must be attracted to the places needing them. Under any plan proposed, several years will be required to build and equip the facilities now being contemplated.

It seems strange that this laudable purpose cannot be accomplished in some simple manner. The need exists now, not five years hence. The solution will not be easily found. It is hoped through a multitude of conferences within the several states, between the profession and farm groups, ways can be found to provide adequate medical care—some way free of the legal shackles which seem to distinguish most proposed legislative solutions.

Respectfully submitted,

F. S. CROCKETT, Chairman.
CHARLES W. ROBERTS.
E. J. MCCORMICK.
VICTOR JOHNSON.
L. W. LARSON.
OLIN WEST.

NEW BUSINESS

Resolution on Christmas Seal Drive of National Tuberculosis Association

Dr. Burt R. Shurly, Section on Laryngology, Otology and Rhinology, presented the following resolution, which was referred to the Reference Committee on Hygiene and Public Health:

WHEREAS, The National Tuberculosis Association has altered its policy and will not permit Christmas Seal funds to finance charitable cases in sanatoriums, a necessary practical relief measure to prevent contagion; and

WHEREAS, Under this new policy the National Tuberculosis Association insists that city and county welfare agencies place and treat all indigent patients, thus placing a greater load on taxpayers and often allowing infected persons to spread the disease because crowded welfare hospitals are unable to treat all patients; and

WHEREAS, This same policy also will not allow Christmas Seal Funds to finance children's camps, a time proved preventive measure to care for children of parents infected with active tuberculosis; and

WHEREAS, The National Tuberculosis Association places educational campaign work in importance over actual care and treatment of tuberculous persons; and

WHEREAS, This educational work, so called, consists in the distribution of literature and propaganda by lay paid social workers and promoters and other nonmedical work; and

WHEREAS, The National Tuberculosis Association exacts percentages ranging from a known 15 to 50 per cent from local community seal drives for nonmedical expenditures such as the aforementioned strictly propaganda campaigns and not for the isolation and actual prevention of tuberculosis; be it

Resolved, That the Board of Trustees of the American Medical Association confer with officers and trustees of the National Tuberculosis Association to determine why the aforementioned policies have been adopted and promulgated in the face of proved medical practice and determine further if the American Medical Association shall continue to support in letter and in spirit the Christmas Seal drive of the National Tuberculosis Association.

Resolutions on Future Medical Care of Veterans

Dr. James C. Sargent, Wisconsin, presented the following resolutions, which were referred to the Reference Committee on Medical Care of Veterans:

WHEREAS, The record of a quarter century of government controlled medical care under the Veterans Administration serves as a shining example of the great difficulties inherent in any program of bureaucratic planning for the care of sick peoples; and

WHEREAS, The strong upswing in government inspired social planning, combined with the patriotic urge of all citizens to do well by those who sacrificed so much in the service of our country, presages a great wave of public and political sentiment toward the giving of free medical care to all ex-servicemen, their wives and families; and

WHEREAS, Activation of tens of thousands of reserve medical officers and the construction of large numbers of temporary army and navy hospitals under the recent war emergency has left a plethora of hastily assembled government medical facilities throughout the country ripe for exploitation by those who, through ignorance or design, would foist socialized medicine on a great block of American citizens by transfer of these facilities from their intended emergency war purposes to a permanent peacetime program of free sickness care for veterans and their families; and

WHEREAS, Any such sudden expansion of government controlled sickness care in America, however well it may be draped with the flag of patriotism, would still be nothing more nor less than one gigantic stride toward the ultimate complete socialization of all medical care in America; and

WHEREAS, The development of any such expansive program of sickness care for veterans and their dependents would cast a withering blight on American medicine that would be tragic for all, including the very veterans it proposed to help; be it therefore

Resolved, That this Association do everything in its power to urge and support the government in providing the best possible medical care for any veteran left disabled through injury or disease occurring in this or any other war; but be it further

Resolved, That it reaffirm its long established opposition to any attempt at the socialization of medicine in America by extending medical benefits under the Veterans Administration to encompass disabilities that obviously are not service connected or to the general medical care of the dependents of veterans.

Resolutions on Licensure of Honorably Discharged Medical Officers Without Examination

Dr. James C. Sargent, Wisconsin, presented the following resolutions, which were referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, A large number of recent medical school graduates have been called to active duty in the armed forces without opportunity to submit to examination for license to practice medicine in the states in which they are to locate; and

WHEREAS, Other older physicians, after abandoning their established homes and practices to serve their country, now find it necessary or desirable to relocate in some states other than the ones in which they had been practicing; and

WHEREAS, An obvious injustice will be done if physicians, as they approach the end of their long years of patriotic sacrifice, are required to hold all personal plans in abeyance until opportunity for examination presents and in the end submit to the risk of a highly technical examination the result of which is beyond appeal; be it

Resolved, That this Association hereby record its belief that any physician who has graduated at an approved medical school with the degree of Doctor of Medicine and who has served honorably as a medical officer in the United States Army, Navy or Public Health Service during the recent war has, by the requirements of his commission and his good record of service, furnished proof above any reasonable question that he is ethically and professionally qualified for license in any state or federal district in the Union; and be it further

Resolved, That a proper memorial to this effect be forwarded to the governor and to the board of medical examiners of each state urging each to license, without examination, any applicant who has been granted the degree of Doctor of Medicine by an approved medical school in the United States and who has served honorably in the United States Army, Navy or Public Health Service.

Resolutions on Creation of Committee on Medical Preparedness

Dr. James C. Sargent, Wisconsin, presented the following resolutions, which were referred to the Reference Committee on Postwar Planning:

WHEREAS, In times of war the enormously expanding armed forces of our country always find it necessary to draw on the medical profession for a great number of volunteers from among the physicians in private practice; and

WHEREAS, Recent wars have caught the country and the profession without a well developed plan for the procurement of this large number of volunteer medical officers; and

WHEREAS, This lack of careful advance planning has led to a disruption of civilian medical care to the point, even, of the risk of great national disaster in the event of large civilian casualties of widespread epidemic; and

WHEREAS, The system of peacetime enlistment of reserve medical officers augmented in wartime by Procurement and Assignment under the War Manpower Commission, while succeeding nobly in its primary purpose, failed notably in accomplishing fair and even spread of military duty throughout the profession as a whole; and

WHEREAS, The evident lack of full use of the professional talents of many medical officers in the services raises serious question regarding the true number of physicians actually needed by the military services in time of war; and

WHEREAS, A heavy dual responsibility rests on the medical profession to inspire and lend its informed opinion to the development of a program that will insure, in the event of future war, a prompt and proper supply of physicians to the armed forces and, at the same time, insure adequate civilian medical care at home; and

WHEREAS, The American Medical Association in exercising, as agent for the profession, its powerful control over the lives and fortunes of the individual doctors of America is, by that very token, charged with the great responsibility of doing all in its power to see that physicians will not be pressured into the armed services in time of war beyond the numbers actually needed, that those who volunteer will be utilized for their medical talents only and that they will be required to serve for a reasonable and well defined period at the end of which they may be released to civilian life and replaced by others from among their colleagues; be it for these several closely related reasons

Resolved, That in the interest of the general public health of our country this Association undertake a thorough study of the proper apportionment of physicians to military and civilian needs in time of war; and be it further

Resolved, That in the common interest of all within the profession this Association undertake a review of past experiences in the procure-

ment and assignment of practicing physicians to the armed forces in an effort to devise some workable program whereby the privilege and responsibility of military duty in future wars may be divided more evenly throughout the profession; and be it further

Resolved, That in the interest of preserving the professional talents of those physicians serving in the armed forces in time of war this Association undertake a critical study of the duties of medical officers during the war just past with special reference to (1) opportunities for study, research and actual treatment of the sick, (2) rotation of medical assignments, (3) quasimedical duties for which technicians and specially trained enlisted personnel might replace physicians, (4) nonmedical duties for which the special talents of physicians are not required and (5) periods of total inactivity as pooled personnel, in unit training areas, in staging areas, awaiting separation; and be it finally

Resolved, That, to implement these closely related studies, the Board of Trustees be and hereby is requested to allot necessary funds and appoint a special Medical Preparedness Committee to study, by means of questionnaires sent to medical officers on release from active duty, by conferences with proper military authorities and by other means the problem as herewith outlined, said committee to report its progress at each future meeting of this House of Delegates until such time as its final report, together with recommendations that it may find indicated, has been submitted and the committee discharged.

Resolution on Activities of Employees of American Medical Association

Dr. S. J. McClendon, California, presented the following resolution, which was referred to the Reference Committee on Executive Session:

WHEREAS, At this time many important problems confront the medical profession; and

WHEREAS, The American Medical Association is in need of the most efficient organization possible in the solution of its problems; and

WHEREAS, Employees who participate in activities outside of the Association cannot render their best service to the Association; therefore, be it

Resolved, That all employees of the Association who are not specifically employed on a part time basis shall be required to devote their full time to the activities of the Association for which they are employed and shall not engage in outside activities from which they derive financial income.

Resolutions on Proposed International Congress on Tropical Medicine

Dr. Thomas K. Lewis, New Jersey, presented the following resolutions, which were referred to the Reference Committee on Miscellaneous Business:

WHEREAS, The exigencies of recent years have intensified research on problems in the field of tropical medicine, resulting in numerous and significant discoveries which materially contributed to the success of our military operations in foreign theaters; and

WHEREAS, Since the general interest in tropical medicine is more widespread than at any time in the past and the medical profession is keenly aware of these problems which become more pressing because of the phenomenal growth of international air travel; and

WHEREAS, It is important that information on these discoveries be brought to the world in order that with the return of peace the benefits of this knowledge may be available to promote the well-being of the people of the world; and

WHEREAS An international reunion of those who have contributed to these advances with others who may be qualified to disseminate their benefits is the most effective measure to diffuse generally this knowledge and since such an international gathering of scientists will materially contribute to the better international understanding and cooperation so essential to an enduring peace; be it

Resolved, That the American Medical Association heartily endorse the proposal of the American Academy of Tropical Medicine that an International Congress on Tropical Medicine and Malaria be held in the United States at an early date and that the American Medical Association join with the American Academy of Tropical Medicine in petitioning the State Department of the United States government officially to sponsor and invite international participation in such a gathering at as early a date as is regarded opportune and direct the secretary of the American Medical Association to advise formally the State Department of this endorsement; and be it further

Resolved, That the Board of Trustees of the American Medical Association be authorized and empowered to appoint a member of the American Medical Association to represent the American Medical Association on a committee composed of duly authorized and appointed representatives of the American Academy of Tropical Medicine, American Society of Tropical Medicine, National Malaria Society, American Society of Parasitologists, Southern Medical Association, American College of Physicians, American Association for the Advancement of Science and the Section on Medical Science of the National Research Council to meet on call from the president of the American Academy of Tropical Medicine for organization and in their organized capacity to assist the State Department in developing, promoting and holding such a congress, and the American Medical Association will give all practicable support to the realization of this project.

Principles Dealing with Medical Care for Veterans Adopted by Medical Society of New Jersey

Dr. Thomas K. Lewis, New Jersey, presented the following statement including a copy of the Monmouth County Plan for Veterans' Medical Service, which was referred to the Reference Committee on Medical Care of Veterans:

The Medical Society of New Jersey is of the opinion that organized medicine should concern itself actively with and should assume a large measure of responsibility for the medical care of the returned wounded and physically unfit veterans of our armed forces. It is of the opinion that detailed plans for such care should be established at a community level.

Based on a study of the Monmouth County plan, which has been established and approved through direct contact with General Hawley, the Medical Society of New Jersey has adopted a set of principles sufficiently broad in scope to provide the framework for the adequate care of veterans in any community.

The Medical Society of New Jersey submits the following principles in the hope that they may be helpful in the production of a formula by the House of Delegates of the American Medical Association to serve as a foundation for county or community organization on a national basis: 1. That there shall be established by each county medical society a liaison committee to serve in close cooperation with the local or regional representative of the Veterans Administration with the following duties: (*a*) to provide screening or diagnostic teams or clinics in well equipped general hospitals or other suitable locations for the purpose of establishing the medical needs of the veteran and directing him to that physician or institution where he may be most adequately treated, (*b*) to utilize to the fullest extent the mechanics of the private practice of medicine, (*c*) to establish fees for service rendered at average reasonable rates existent in the particular community, (*d*) to utilize in those cases requiring hospitalization the approved general hospitals and specialty hospitals in the immediate locality, except where state, county or Veterans Administration hospitals are indicated as most suitable for the particular condition involved, (*e*) to obtain, through close cooperation with the local representative of the Veterans Administration, the greatest possible simplicity of forms for obtaining authorization for rendering reports and bills and (*f*) to serve as an appeal board to determine adequacy of medical service and to be endowed with disciplinary power over physicians for the purpose of protecting the interests of the veteran and the Veterans Administration; 2. that existing general hospitals be used to the fullest possible extent in each community with enlargement where necessary by federal grants, as the indiscriminate erection of new institutions by the Veterans Administration or the federal government would be wasteful and in most cases would remove the veteran far from his home, and it is our studied opinion that new institutions should be erected only where need for special types of cases might require long and continued hospitalization or for large groups requiring unique or unusual type of medical care and the need for such institutions should be clearly demonstrated before establishment; 3. that the eligibility of a veteran for care at government expense should be limited to veterans who (*a*) have service connected disability or (*b*) who are in need economically.

It is maintained that any veteran not suffering from service connected disability and not in acute economic want should obtain his medical care in the same manner as any self-sustaining citizen.

The Monmouth County Plan for Veterans' Medical Service

The purposes of the Monmouth County plan are to provide individual doctor-patient relationship, a free choice of physician as far as is compatible with good medical practice, the elimination of the psychologically bad situation of treatment by a "government doctor" in whose selection the patient has had no part and the avoidance of the necessity of traveling long distances to a veterans' facility by providing medical and hospital care within a reasonable distance of the veteran's home.

The plan, as authorized by Major Gen. Paul R. Hawley, Acting Surgeon General of the Veterans Administration, is as follows:

1. All members of the Monmouth County Medical Society and of other county medical societies in New Jersey who are designated by the Monmouth County Medical Society will, with their consent, be designated as part time physicians of the Veterans Administration.

2. The Monmouth County Medical Society will establish in such hospitals as it may determine triage or sorting clinics. Such clinics will be open for the examination of veteran patients at such times as the need indicates, probably once each week or more often. Each such clinic will be staffed by such specialists as are indicated after a trial. The function of these clinics is (a) to determine by examination whether or not the veteran needs treatment, (b) to determine what such treatment should be and where it should be given and (c) in cases in which treatment is authorized by the Veterans Administration to refer the patient to the proper physician or hospital for such treatment.

3. The Monmouth County Medical Society will form a disciplinary or reference committee to see that the patient receives the treatment indicated by the designated physician and to pass on complaints from all sources.

4. The Monmouth County Medical Society will operate this program for a trial period not to exceed three months without pay, except that physicians giving treatment authorized by the Veterans Administration will be paid fees. The Monmouth County Medical Society will submit to the Veterans Administration a schedule of fees which its members believe to be reasonable and just, and the Veterans Administration, after consultation with the society, if necessary, will determine the schedule of fees to be paid. Except for the payment of authorized service to patients, the Veterans Administration will not be obligated financially during this trial period.

5. The Veterans Administration will provide the proper liaison and facilities for making prompt decisions as to service connection in each of the clinics.

It is also anticipated that the foregoing program will be correlated with the Veterans Administration plans to use local hospital facilities, both general and specialized. The veteran hospitalized in a general hospital would be treated by a designated physician who is also a member of the staff of that hospital. Other arrangements will have to be made regarding specialized hospitals, such as nervous and mental, having full time closed staffs.

It should be noted that in the foregoing plan every effort is being made to utilize the services of ex-veteran physicians, both as designated physicians and as members of the clinic staff. The proposal to have the clinic staff made up of specialists follows the previous practice of the Veterans Administration, and it is felt to be the quickest and most efficient way of arriving at exact diagnosis. Treatment will be put in the hands of the general practitioner whenever possible.

Resolutions on Permanent Conference on Medical Care

Dr. Thomas K. Lewis, New Jersey, presented the following resolutions, which were referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, It has long been the objective of organized medicine in America that satisfactory distribution of the best possible quality and quantity of medical care shall be available, physically and economically, to all the people of the United States and in all parts of the United States; and

WHEREAS, The government of the United States is now officially committed to the attainment of the same objective; and

WHEREAS, The realization of such an objective can be most effectively accomplished through wholehearted participation by the medical profession and through the satisfactory integration of any plan with the mechanics of the practice of medicine as developed in this country through the experience of one hundred and seventy years incidental to the evolution of the American way of life; therefore be it

Resolved, That this House of Delegates instigate the formation of a Permanent Conference on Medical Care to be created immediately either by (1) the American Medical Association, (2) the Congress of the United States or (3) the President of the United States, to be composed of an equal number of official representatives of (1) the American Medical Association and (2) the governmental agencies concerned with health services and that the members of such conference be given equal powers of action to the end that the American people may be provided in our time with the best possible quality, quantity, availability and distribution of medical care by concerted American democratic action with resultant peaceful solution of the medical care problems which concern us all; and further be it

Resolved, That the representatives of the American Medical Association to this conference be appointed by the Speaker of this House of Delegates.

Resolution on Recognition of Physicians Who Served on Procurement and Assignment Service in Various States

Dr. William D. Stovall, Wisconsin, presented the following resolution, which was referred to the Reference Committee on Postwar Planning:

WHEREAS, The need of the military for physicians during the war period was acute and required large numbers of them; and

WHEREAS, The selection of these physicians was delegated to the Procurement and Assignment Service in the various states; and

WHEREAS, This service rendered loyal, energetic and effective effort in the selection of those men who were to be made available to the military service at the least possible hazard to the civil population; therefore be it

Resolved, That the House of Delegates authorize the recognition of this devoted and unselfish service by awarding an appropriate symbol to the medical personnel of the Procurement and Assignment Service of the nation and the various states which will be an expression of the appreciation of the medical profession of the nation.

Resolution on Early Return of Physicians and Medical Students Now in Military Service

Dr. William D. Stovall, Wisconsin, presented the following resolution, which was referred to the Reference Committee on Medical Education:

WHEREAS, It is acknowledged that our national medical resources have been such as to provide the armed forces with the finest medical service available in the world; and

WHEREAS, Despite the efforts to utilize the supply of medical personnel to the best advantage there existed to a considerable extent ineffective distribution and poor utilization of medical personnel within the armed services; and

WHEREAS, The medical resources of the country are impoverished for civilian usage and this condition has been accentuated with full effects only to be felt in the future by the refusal of Selective Service to defer prospective medical students; and

WHEREAS, There exists under the control of military officials a large pool of medical students and prospective medical students who, in the interest of the health of the nation, should be released to the pursuit of their chosen profession; now therefore be it

Resolved, That the State Medical Society of Wisconsin, through its House of Delegates in annual session in Milwaukee in October 1945, urges its officers and official representatives to initiate or support such programs as may be desirable to assure not only the early return of medical veterans to civilian practice but the return of medical school students and prospective medical school students to additional training.

Resolutions on Appointment of Committee for the Study of Nursing Problems and Education

Dr. William D. Stovall, Wisconsin, presented the following resolutions, which were referred to the Reference Committee on Medical Education:

WHEREAS, The medical profession of Wisconsin has over a period of several years interested itself vitally in the problem of nursing education and classification and functional utility and believes there is a definite need of reevaluation and alinement with contemporary economic, social and public health need; and

WHEREAS, There is formulating a movement on the part of nursing educators and leaders to restudy the problem of nursing education and functional level of practice in the light of prewar, war experience, social need and public health expediency; and

WHEREAS, The problem is so definitely one of multiple jurisdictional interest and responsibility in which the medical profession as well as hospital management have a major part and obligation to the public to use the weight of their experience and authority in assisting to bring about the most perfect program possible in the nursing field; and

WHEREAS, It is necessary in the interest of reciprocal arrangements for interstate movement and practice of nurses to reach the national level of influence; therefore be it

Resolved, That the American Medical Association emphasize the need for the constituent state associations to interest themselves in this problem and to bring about a truly national picture and analysis of the problem; and be it further

Resolved, That a committee for the study of nursing problems and education to act as a unit of a joint committee composed of hospital and nursing personnel, each to be appointed by their respective national organizations, be appointed by the President of the American Medical Association and that the American Medical Association request these respective national organizations to appoint similar committees.

Introduction of Major General Paul R. Hawley

The Speaker announced the presence of an honored guest, Major General Paul R. Hawley, and requested Dr. Fred W. Rankin, Past President, to escort him to the platform.

Address by Major General Paul R. Hawley

The Speaker introduced Major Gen. Paul R. Hawley, acting surgeon general of the Veterans Administration, who addressed the House as follows:

Mr. Speaker and Officers of the American Medical Association, Members of the House of Delegates: I consider it a high privilege to be permitted to appear before you. You are the representatives of the best in American medicine. I want to report to you as one medical man to another what we propose to do in the medical care of the veterans. There have been several things said here today that I should like briefly to comment on before I plunge into my subject.

I know of no better place than this to pay the greatest possible tribute I can to the sixteen thousand American doctors who served our forces in the European Theater of Operations. The great majority of these—and certainly all of those in the key positions—were members of this Association. I was impressed this morning by a statement made from this platform—mention of the great work done by American medical colleges in the past twenty-five years. I heartily endorse this statement. I have been asked frequently what was the greatest advance in medicine between World War I and World War II which had accounted for the great reduction in the case fatality rate among the wounded in World War II.

I was expected to say plasma or whole blood, sulfonamides, penicillin. I know that these certainly played a great part; but, from very close association with the wounded, I am quite sure in my own mind that the greatest advance between the two world wars was the better education of doctors. There is no substitute for a good doctor.

I should like also briefly to comment on a resolution which was offered here on the inclusion of osteopaths in H. R. 4717. I objected strenuously before the subcommittee rewriting this bill when that proposal was made; and General Bradley, in his official report on the bill, also objected to that provision.

Now I come this afternoon to present for your consideration the greatest single problem that has ever faced American medicine, and perhaps one of the greatest problems ever in the history of medicine. This is to give a very high standard of medical care to approximately twenty million men.

The medical care of the veteran was attempted, after the last war, largely by a full time corps of doctors. There were only four million veterans at that time, and I think that, no matter what misstatements may have been made of the medical service of the Veterans Administration, it is at least a safe statement to say that that standard of medical care was never quite high enough to satisfy the medical profession, the veteran or the people of the country.

I think we should inquire into the reasons why it was not a complete success. One reason was that this full time corps was organized hurriedly. There was no nucleus around which to organize, and doctors were procured often without too much attention to their qualifications. The Army, I know in my experience, obtained a great many new doctors after the last war; and, with an old organization behind them, with every facility for making determinations of qualifications, there were mistakes made. So it is not surprising that mistakes were made by the Veterans Administration.

Then, when this corps was organized, the medical service was submerged under lay administrators—both in the central office in Washington and in the field. These administrators not only knew nothing of medicine but too frequently were not very much interested in the problems of medicine. Then, in the procurement of new doctors, the Civil Service dictated the selection. They also prevented the removal of the poor material that did get in.

The doctors in the Veterans Administration were isolated from the rest of the profession and from the advances in medicine.

This Association, for sound reasons of its own, made it almost impossible for a doctor in the Veterans Administration to become a member, and they began to feel that they were outcasts and pariahs in the profession. I have been repeatedly urged to petition you—and a resolution from another source has been placed before you today—to grant membership in the American Medical Association to the doctors in the Veterans Administration. I should like very much to see this done; but I shall not ask you for this until the medical service of the Veterans Administration is reorganized, as it is wisely stated in the resolution, and meets the standard which you want it to meet. I feel quite confident that, when I come before you at that time, you will generously extend the privileges of this Association to the doctors in the Veterans Administration.

It has been charged that, on the whole, the doctors in the Veterans Administration were discouraged and merely drifting along; that they went to work at 8:30 in the morning and quit at 4:30 in the afternoon; that they were holding jobs rather than practicing medicine. I think it is true that there have been, and perhaps still are, some of that type in the Veterans Administration, because it is from that type that I am now getting the most opposition to the reorganization of this medical service. But, gentlemen, I would be very unfair to many fine doctors in the Veterans Administration if I did not assure you that one of the most encouraging things that I have found since coming to the Veterans Administration is that there are some very high class doctors in the Veterans Administration—doctors who have refused to give way to discouragement, refused to admit defeat in a defeated organization. A goodly number of these doctors have qualified themselves by their own efforts, working at night and without any encouragement from above, to qualify for their boards. And what a struggle they must have had!

We have some fine hospitals. We have some fine clinics. Only recently a surgical clinic was held in one of our hospitals. I was unable to attend and I sent Elliott Cutler and Glenn Spurling, both of whom are known to you. They both were enthusiastic about what they saw. Cutler wrote to me "I would have been proud to have had that clinic given on my service at the Brigham." So there are good doctors in the Veterans Administration. The only trouble is there aren't enough of them. We have got to get more.

If we failed to take care of only four million veterans satisfactorily with a full time corps, it seems to me that it would be folly even to approach the problem of attempting to take care of twenty million veterans with a full time corps. However, we must have some full time doctors in the Veterans Administration. There must be continuity in our hospitals that can never be had with part time people. There are other positions requiring some administrative as well as medical background that can be filled only by full time physicians. So we must have some full time physicians, but we can't in any way solve the problem with such a corps. The problem can be solved only by the organized medical profession of this country, and I repeat the word "organized." That is the profession, the organization, that you represent.

The only question is, How shall it be solved? Well, at present we have about 72,000 beds in operation in veterans' hospitals with 11,000 emergency beds, so called, crowded into the halls, totaling about 83,000. To operate these beds and fill the medical positions in the regional office we need about 3,600 doctors at the moment, and the need is increasing every day. We have 2,300, so we are short 33 per cent of the doctors that we now need full time. Of these 2,300, 1,700 are in uniform. A great many of those in uniform are doctors who were formerly with the Veterans Administration and who might be expected, if they were invited, to stay with the Veterans Administration after they have been separated from the service. But a recent canvass of all those 1,700, regardless of where they came from or what they were doing before the war, showed that only 35 per cent would elect to stay with the Veterans Administration after the war.

Now that means that unless we get new blood and get it fast, by the spring of 1946 we are going to have only one third as many doctors as we require at the present time to carry our load, and our load is increasing daily. So obviously we have

got to have help in the medical care of the veteran from the organized profession of this country. That situation is very plain to me; yet in face of this plain situation there is heavy pressure from several sources to force us to take over every existing army and navy hospital built during the war and to try to operate them—I say "try to operate them"—for the veterans. Most of these hospitals were built in isolated places, having been located the same way in which some effort is now being made to locate new veterans' hospitals—by political expediency. Such are usually out in the country where it is impossible to get any part time help to staff them.

You may ask me now that, since we can't staff the hospitals that we already have, why do we even think about building more hospitals? Well, we have got to have more beds if we carry out the program of the Congress for the veteran. We would use beds in existing hospitals if we could get them; but there are few places in this country where there are any beds available, and no one knows that better than this group right here. We make every effort to put beds under contract wherever we can get them, but we are not very successful. On the other hand, as you know, as the law now stands we are not permitted to pay for beds in hospitals for non-service connected cases, and the policy has been announced both by the President and by the Congress that we shall provide some beds for non-service connected cases.

So, if we are building new beds now, how do we propose to staff them? If you will see where the great majority of these new beds are being located, you will understand that we propose to staff them almost exclusively by physicians in the private practice of medicine. To solve this particular problem of associating our hospitals with the schools of medicine and with other hospitals of the country—not only the schools of medicine, because we are also going into towns that have a fine medical profession without having a medical school—I have been most fortunate in obtaining the services of Dr. Paul B. Magnuson. He has given up his practice and has come full time because he sees, in this great need, an opportunity not only to serve the veteran but also to serve the medical profession. He has asked to advise him Dr. Bennett of Baltimore and Drs. Pepper and Rodman of Philadelphia, and Dr. Darrach of New York—men that he could easily get to, that lived close to Washington. I offer to you the names of these gentlemen as a guaranty that what we propose to do in the care of the veteran will not only be in the great interest of the veteran but also will be in the interest of the profession. Not one man that I have mentioned here but has your greatest confidence.

We hope to get younger physicians returning from the service, qualified men who have passed their boards, men who have come back without financial resources with which to start practice, having spent most of their money before going into the Army in getting their qualifications. They are coming back now, having to start in practice without much to start with. We think we can help this group of fine young specialists by having them take over services part time in such of our hospitals as are located convenient to medical centers. I need only to say that from such men there will be found attending staffs in every sense of the word, with full responsibility for the patients, and you gentlemen know what an attending staff is and what is required of it. Then we shall provide residencies in these hospitals—also for returning servicemen whose education has been interrupted or who have not even started their qualifications for a board. We have that system now in operation in one hospital. It is being started in another, and a third has been surveyed. This program will be extended as rapidly as it is humanly possible to get around to our hospitals. There has been objection in certain quarters from a misconception of our proposals. It is a curious thing that there has been opposition for many years, from certain groups, to teaching in veterans' hospitals. These people hold the curious idea that, when you teach in a hospital, patients necessarily are guinea pigs. Obviously, a veteran is never going to be a guinea pig. The veteran is a private patient. The only difference between the veteran and the wealthiest patient in the best hospital in this country is that the government is paying the veteran's bill.

So much for the hospitalization of the veteran. An even larger problem is his outpatient care and treatment. Here we run into a legal obstacle which causes considerable administrative difficulty. This is that the veteran is entitled to outpatient treatment at government expense only for a service connected disability; and so the service connection of his disability must first be established before the treatment can be authorized by the Veterans Administration.

Now, after World War I this sort of thing was attempted by contracts with individual physicians throughout the country. Too many of these designated physicians were political appointees. Busy physicians usually shied away from these appointments. While the great majority of the designated physicians were scrupulously honest, there were scandals. There was collusion with patients, and fees sometimes were split with patients for unnecessary treatment. We cannot now afford, as a Veterans Administration or as a profession of medicine, to have any scandal in our outpatient treatment of the veteran. We want no small group of designated physicians for veterans. We want every veteran to have the free choice of his physician; and how can he have it? He can have a free choice only if every qualified and ethical physician accepts appointment by the Veterans Administration.

The Veterans Administration can't deal, obviously, with 125,000 individual physicians in this country. That would be a physical impossibility. We must deal with organizations of physicians. Now, how shall we deal with organized medicine? On our terms or on the terms of organized medicine? Well, it seems to me, since organized medicine is going to have to do most of this work, that we in turn shall have to deal with you largely on your own terms. I hasten to say that we have already found organized medicine most fair and reasonable in the scales of fees which have been submitted to us. The profession has shown every intention of doing its full part in the solution of this problem. We rather think that no nationwide plan can succeed because the situation in the medical profession and the distribution of veterans vary widely in different parts of the country.

On the other hand, we rather shudder to think of having to deal with the three thousand county medical societies in this country. We have two plans under way now with state organizations, and these promise to be very successful even though one of the states is highly urban in certain parts and highly rural in others. We thought that perhaps this would be a factor we would have to consider in every state—the difference between the rural and urban sections of the state—but we are assured by both of these state organizations that this isn't important, and that they can have one single scale of fees throughout the state.

Our only stipulations in any plan are that the veteran receive adequate treatment—as much as he needs and no more than he needs—and that organized medicine itself set up the necessary control of this medical service—the policing of it, if you will—to insure that the veteran gets such care and that neither the veteran, the doctor or the government is in any way defrauded. We have just started to organize this outpatient service. First came to us those public spirited physicians in Monmouth County, N. J. They first came last May with a plan that was rejected for reasons that we have never discovered. As soon as we heard of that plan we telephoned the Monmouth County Society and asked if they were still interested. They were interested and their plan is in operation.

We now have a Michigan plan, where they have a medical service in the state, and also a Kansas plan. These two plans are interesting in that they vary in this one essential, and in only one essential. From the Michigan Medical Service we buy medical service to the veteran; and we pay the Michigan Medical Service for it. Dr. Callahan, the president of the Kansas Medical Society, for reasons perfectly good to that society, didn't want it to participate in any of the financial arrangements between the Veterans Administration and the individual doctors. This was quite agreeable to us. The state society was to act only as an agent for the individual doctors of the state. In both plans we are to set up an administrative office in connection with the state agency, whether it is a prepayment medical service or a state association, taking away from

them, as much as possible, the administrative work connected with service to the veterans, and to provide an agency which can imediately determine service connection and authorize outpatient treatment.

We should like to deal with every other state in the Union. We are so limited in staff that it is difficult for us to get around and interview you; but we have immediately seized on every proposal that has been made and have worked out agreements that were mutually satisfactory.

In conclusion, I want to assure you that, even though I have spent thirty years in a highly organized government service of medicine, I should deeply regret a government control of the medical profession. I have a great respect for the profession of medicine. I was brought up in an atmosphere of medicine. I have a respect for the dignity of the profession. My grandfather was a physician. My father was a physician. I have respect for organized medicine. My grandfather and my father and myself were at one time paying members of this Association. They kept on paying until they died; but, by the courtesy of this great Association, when I put on a uniform as a career I was made a Fellow, which I have been for many years. Before I joined the Army I too was a member of my county medical society down in Indiana and my state medical society and the American Medical Association. So organized medicine is nothing new to me.

The people in this country have not lost any respect for the physicians of this country. It has been stated today on this platform that there is some doubt as to whether or not the people of the country have lost confidence in the organization of medicine. Whether this is true or not, it is something to be considered.

How better can we establish this great organized profession in the esteem of the people of this country than for us together to attack this great public problem and show our people that a free and unregimented and ungoverned profession can solve the problem and that it is not necessary for the government to tell the medical profession how to run its business? I am just as much interested as you are in keeping the government out of the medical business. I am committed to only one principle, that the veteran shall receive the best in American medicine. I can't support any program which denies him the best in American medicine, and I am quite sure it will be a long time before we find the best in American medicine, in any quantity at least, in other than the civil practice of medicine.

If I am not permitted to bring the best in American medicine to the veteran, I shall withdraw at once from the program. I shall neither let down the veteran nor betray our own great profession.

The Speaker, with permission of the House and General Hawley, referred the address to the Reference Committee on Medical Care of Veterans for a report.

Resolution on Survey of Medical Societies in Metropolitan Centers Re Qualifications of Their Physicians

Dr. C. B. Conklin, District of Columbia, presented the following resolution, which was referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, The charge is frequently made that in metropolitan centers of the United States there is no reliable source of information with respect to the qualifications of physicians, especially if they are engaged in specialties; and

WHEREAS, In the opinion of the Medical Society of the District of Columbia it is desirable for medical societies to make available to the public such information about physicians; and

WHEREAS, The Medical Society of the District of Columbia has classified its members according to type of practice, setting up qualifications for listing in the specialties and in so doing has rendered a public service; and

WHEREAS, The public has taken full advantage of an information center established by the Medical Society of the District of Columbia, calls for information having steadily increased and commendations having been received from business establishments, the government and other institutions and organizations; therefore be it

Resolved, That the House of Delegates of the American Medical Association instruct the Secretary of the Association to make a survey of the medical societies in the metropolitan centers of the United States to ascertain to what degree they have made information with respect to the qualifications of their physicians available to the public and, where this has not been done, recommend that such classification be undertaken.

Resolution on Development of Specific National Health Program

Dr. C. B. Conklin, District of Columbia, presented the following resolution, which was referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, The Medical Society of the District of Columbia has long favored the adoption of a constructive program by the American Medical Association where social and economic issues relating to medicine are concerned; and

WHEREAS, In recent months there have been encouraging signs of positive action by the Association's Council on Medical Service and Public Relations; and

WHEREAS, In the opinion of the Medical Society of the District of Columbia efforts should be continued to project a program which will receive wide public support; be it therefore

Resolved, That the House of Delegates of the American Medical Association instruct its Council on Medical Service and Public Relations to proceed as promptly as possible with the development of a specific national health program, with emphasis on the nationwide organization of locally administered prepayment medical plans sponsored by medical societies to be submitted to the House at its meeting in 1946 for its consideration.

Resolutions on Use of Sulfonamides

Dr. C. W. Lane, Section on Dermatology and Syphilology, presented the following resolutions adopted by the section at its 1944 session, which were referred to the Reference Committee on Miscellaneous Business.

Dr. Howard Fox and Dr. Marion B. Sulzberger presented the following resolutions, which were passed by the section:

WHEREAS, Local and general sensitization to sulfonamides sometimes of a serious nature are being reported with increasing frequency following topical applications in relatively minor diseases; and

WHEREAS, The local use of these drugs may prevent their subsequent administration in illnesses of a serious nature; be it

Resolved, That the Section on Dermatology and Syphilology condemns the present indiscriminate local use of sulfonamides in diseases in which other ordinarily less harmful remedies are equally efficacious; and be it further

Resolved, That a copy of this resolution be sent to the Food and Drug Administration of the federal government.

Resolutions on Minimum Wage Standard

Dr. F. W. Winslow, New York, presented the following resolutions, which were referred to the Reference Committee on Miscellaneous Business:

WHEREAS, The House of Delegates of the Medical Society of the State of New York agrees fully with the sentiments expressed by Dr. Edward R. Cunniffe, president of the society, regarding the advisability of organized medicine showing its attitude on matters concerning the economic welfare of the public; therefore be it

Resolved, That the House of Delegates go on record as favoring a minimum wage standard sufficiently high to permit the worker to be and to remain an independent individual able to pay his or her way in the purchase of the necessities of life; and be it further

Resolved, That the House of Delegates of the American Medical Association be urged to adopt a similar resolution; and be it further

Resolved, That the House of Delegates of the American Medical Association is in accord with these sentiments.

Resolution on Change in System of Medical Care

Dr. T. K. Gruber Michigan, presented, without reading, a Resolution on Change in System of Medical Care, which was referred to the Reference Committee on Legislation and Public Relations.

Resolutions on Transfer of Children's Bureau

Dr. O. W. H. Mitchell, New York, presented the following resolutions, which were referred to the Reference Committee on Hygiene and Public Health:

WHEREAS, The U. S. Public Health Service is the official agency of the federal government primarily responsible for the prevention of disease and the protection of the public health; and

WHEREAS, The U. S. Public Health Service carries on these activities through the state departments of health and other state agencies in the field of public health; and

WHEREAS, The health services for mothers and children now conducted by the Children's Bureau of the Department of Labor parallel and in many instances overlap the responsibilities of the Public Health Service and require duplication of district facilities and personnel and a confusing duplication of federal relationship with state health departments and other state agencies in the field of public health; and

WHEREAS, It would be more logical, more effective and more economical to have all public health responsibilities concentrated in one federal agency and establish one direct channel of relationship with state health departments; therefore be it

Resolved, That the House of Delegates of the Medical Society of the State of New York hereby memorializes the House of Delegates of

the American Medical Association to petition the Congress and the President of the United States to transfer the personnel, facilities and budget of the Health Services of the Children's Bureau from the Department of Labor to the U. S. Public Health Service; and be it further

Resolved, That the House of Delegates of the American Medical Association directs that a petition be sent by the proper officers to the Congress and the President of the United States urging this transfer of the personnel, facilities and budget of the Health Services of the Children's Bureau from the Department of Labor to the U. S. Public Health Service.

Resolution on Opposition to H. R. 2969

Dr. E. M. Gans, Montana, presented, without reading a Resolution on Opposition to H. R. 2969, which was referred to the Reference Committee on Legislation and Public Relations.

Resolutions on Opposition to H. R. 525 and S. 1271

Dr. Stanley H. Osborn, Section on Preventive and Industrial Medicine and Public Health, presented the following resolutions, which were referred to the Reference Committee on Industrial Health:

WHEREAS, There has been introduced into Congress two bills, H. R. 525 and S. 1271, which propose an extension of the activities of the Department of Labor to undertake industrial hygiene activities; and

WHEREAS, These bills empower the Secretary of Labor to make grants of money to state agencies administering labor laws to undertake industrial hygiene work; and

WHEREAS, Industrial hygiene is a function of public health authorities and is now being done by the United States Public Health Service and by the health departments of forty states; and

WHEREAS, Money for industrial hygiene purposes is already allocated by the United States Public Health Service to state departments of health through Sec. 314, Public Law 410, 78th Congress; and

WHEREAS, The undertaking of industrial hygiene activities by the Federal Department of Labor and state agencies administering labor laws, already being done by the United States Public Health Service and state departments of health would result in confusion and waste of public funds; therefore be it

Resolved, That the House of Delegates of the American Medical Association go on record as opposed to H. R. 525 and S. 1271 in their present form, which permit labor agencies to undertake industrial hygiene activities now being done by federal and state public health agencies; and be it further

Resolved, That any expansion of tax supported industrial hygiene services be developed in a manner to provide immediate or ultimate responsibility for direction of the program by the state departments of health in cooperation with the United States Public Health Service.

Resolutions on Earliest Possible Release of Physicians from Military Service

Dr. C. R. Keyport, Michigan, presented the following resolutions, which were referred to the Reference Committee on Postwar Planning:

WHEREAS, With the cessation of hostilities the need for medical officers in the armed forces is greatly reduced; and

WHEREAS, The President of the United States has announced that the number of civilian physicians was reduced by some 60,000 who volunteered for military service and was further reduced by more than 20,000 deaths among civilian physicians; and

WHEREAS, During the period of the war, replacement of physicians in civilian practice has been practically nil; and

WHEREAS, There is an urgent need for the return to civilian practice of many thousands of physicians now in the armed forces; therefore be it

Resolved, That the American Medical Association strongly urge that every physician in the armed forces who can possibly be spared and whose duties are not essential to the health and care of our own military personnel be released from service with least practicable delay; and be it further

Resolved, That copies of this resolution be forwarded to the members of both houses of the Congress of the United States.

Duration of Session

The Speaker requested the Reference Committee on Rules and Order of Business to bring in recommendations concerning the possibility of the adjournment of the House on Wednesday instead of Thursday.

Resolutions on Expansion of Medically Sponsored Voluntary Group Health Care Programs

Dr. James Stevenson, Oklahoma, presented the following resolutions, which were referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, Group health care programs sponsored and operated by the medical profession in many parts of the country are providing the means whereby millions of persons are able to secure good medical care and hospital service on a voluntary budgeted basis; and

WHEREAS, This health care has been rendered in a manner highly satisfactory to both patient and physician, resulting in better understanding between the two; and

WHEREAS, The voluntary type of group health care is to be preferred, in the interest of the people's health, to compulsory, political control; and

WHEREAS, Some areas of the country have no such programs in operation at the present time; and

WHEREAS, A large proportion of the people desire group health service on a national basis; therefore be it

Resolved, That the president and other officers of every state medical association use their best efforts to secure prompt action by their state association in inaugurating new, or increasing the benefits of existing, prepayment health care programs in every state; and be it further

Resolved, That the Council on Medical Service and Public Relations of the American Medical Association be instructed by the House of Delegates of the American Medical Association to correlate the various voluntary state and local programs in order to develop a group health care plan on a national basis, with uniform principles, rates and reciprocity between all, for the benefit of subscribers located in all parts of the country.

Resolutions on Expediting Return of Physicians on Duty with Military Forces to Civilian Practice

Dr. Frank R. Reeder, Michigan, presented the following resolutions, which were referred to the Reference Committee on Postwar Planning:

WHEREAS, The Senate of the United States has seen fit, by Senate Resolution 134, to cause a subcommittee of the Senate Military Affairs Committee to investigate the disparity between the ratio of civilian doctors to the population as compared with the ratio of medical officers to soldiers; and

WHEREAS, In 1942 the War Manpower Commission set up the ratio of one doctor to each 1,500 of the civilian population as a safe ratio for adequate medical care in this emergency; and

WHEREAS, It is reliably reported that the civilian ratio is now one to 1,800, while the military ratio is one to 180; and

WHEREAS, Since 1942 there have been practically no replacements in the field of civilian medicine despite an annual death rate among civilian physicians of more than 7,000 and an appreciable increase in the total civilian population; and

WHEREAS, The Army is in the process of discharging several million men, thus reducing the over-all need for medical officers; and

WHEREAS, Rather than reducing the number of medical officers there has been a net gain of approximately 600 since Jan. 1, 1945; therefore be it

Resolved, That the House of Delegates of the American Medical Association, in convention assembled, commend this action on the part of the Senate of the United States and urges that every effort be made to expedite the return to civilian practice of every medical officer who it is found can be spared from military service without endangering the lives or health of our armed forces; and be it further

Resolved, That a copy of this resolution be forwarded to each member of the United States Senate and to the Secretary of War.

Resolution on Medical Care of Veterans

Dr. Frank R. Mount, Oregon, presented, without reading, a Resolution on Medical Care of Veterans, which was submitted to the Reference Committee on Medical Care of Veterans.

Resolution on Hospital Staff Meetings

Dr. Frank R. Mount, Oregon, presented, without reading, a Resolution on Hospital Staff Meetings, which was referred to the Reference Committee on Medical Education.

Resolution on Spokesman for American Medicine

Dr. L. S. Goin, California, presented the following resolution, which was referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, The past few years have seen the development of several organizations designed to protect the corporate body of medicine from governmental encroachment, this development being the reply to the obvious demand and need for such protection; and

WHEREAS, The American Medical Association only recently has created a Council on Medical Service and Public Relations, which by reason of red tape and administrative difficulties has scarcely yet begun to serve its real purpose; and

WHEREAS, The delegates from California believe in this Council, approve of its stated objectives and are desirous of so implementing the Council that it may in fact as well as in theory accomplish those things for which it was intended; now therefore be it

Resolved, That this House directs that the Council on Medical Service and Public Relations shall be the sole spokesman for American medicine; that it shall be given whatever funds it may require to carry out the purposes for which it is intended, and that the Council be directed to retain an executive for full time service, with such secretarial assistance as he may require, the House of Delegates stating explicitly that the qualifications of such executive shall be determined only by the Council.

Resolution on Council on Medical Service and Public Relations

Dr. Dwight Wilbur, California, presented the following resolution, which was referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, The American Medical Association has created a council on public relations, known as the Council on Medical Service and Public Relations, which Council is charged with the responsibility of representing the American Medical Association to the public and governmental agencies of the United States; and

WHEREAS, The presentation of the official point of view of the American Medical Association by other councils, committees and individuals leads but to confusion and to different and divergent views, with the effect of apparent disunity in the profession; and

WHEREAS, At this time the profession is in need of greater unity than ever before in its history; therefore be it

Resolved, That the Council on Medical Service and Public Relations shall be the sole agency for presentation of the attitude of the American Medical Association relative to matters in which the organized profession should or must make representation to the public or to the government.

Resolutions on Willingness to Cooperate in National Conference of Labor

Dr. A. F. R. Andresen, for the Medical Society of the State of New York, presented, without reading, Resolutions on Willingness to Cooperate in a National Conference of Labor, which were referred to the Reference Committee on Legislation and Public Relations.

Resolution on Asphyxial Accidents

Dr. J. Stanley Kenney, New York, presented a resolution dealing with asphyxial accidents, requesting its reference to the Council on Medical Education and Hospitals. The resolution was so referred.

Resolutions on Prompt Discharge of Medical Officers

Dr. Ivan Fawcett, West Virginia, presented the following resolutions, which were referred to the Reference Committee on Postwar Planning:

WHEREAS, Many complaints have come to us that medical officers are being kept in the Army with little or no work to do; and

WHEREAS, Many complaints are coming that medical officers since V-J day are being given combat training without any probability of it ever being useful to them in after life; and

WHEREAS, The need for civilian physicians, certainly as far as West Virginia is concerned, is very acute, some emergencies finding medical care unavailable; therefore be it

Resolved, By the Council of the West Virginia State Medical Association, that we urge on the Surgeon General of the Army and of the Navy the necessity for prompt discharge of all medical officers who can possibly be spared from the armed services; and be it further

Resolved, That a copy of these resolutions be sent to each Senator and each Representative from West Virginia, asking their aid in securing the release to civilian life of West Virginia medical officers in the armed services not actually needed; and be it further

Resolved, That a copy of these resolutions be sent to our representatives in the House of Delegates of the American Medical Association with the request that they present this matter to the House of Delegates of the American Medical Association for appropriate action.

Resolution on Establishment of Section on General Practice

Dr. H. A. Luce, Michigan, presented, without reading, a resolution dealing with the establishment of a new section, which was referred to the Reference Committee on Sections and Section Work.

Appeal from Medical Director of Northern Permanente Foundation from Action of Washington State Medical Association

Dr. Olin West, Secretary, at the request of the Board of Trustees, presented, without reading, an appeal from the medical director of the Northern Permanente Foundation, which was referred to the Reference Committee on Legislation and Public Relations.

Communications on Social Hygiene

Dr. Olin West, Secretary, presented, without reading, communications referring to social hygiene, which were referred to the Reference Committee on Hygiene and Public Health.

The House recessed at 5:40 p. m. to meet at 10 a. m., Tuesday, Dec. 4, 1945.

Second Meeting—Tuesday Morning, December 4

The House of Delegates was called to order at 10:10 a. m. by the Speaker, Dr. H. H. Shoulders.

Roll Call

On motion of Dr. Arthur J. Bedell, Section on Ophthalmology, duly seconded and carried, the House dispensed with the roll call.

Presentation of Minutes

Dr. George W. Kosmak, New York, moved that the House dispense with the reading of the minutes. The motion was duly seconded and carried.

Report of Reference Committee on Credentials

Dr. G. Henry Mundt, Chairman, reported that one hundred and seventy members of the House of Delegates had been registered.

Report of Reference Committee on Rules and Order of Business

Dr. Francis F. Borzell, Chairman, presented the following report:

Your Reference Committee on Rules and Order of Business recommends to the House of Delegates the following order of business: Tuesday: Proceed with the Order of Business for today as published on page 24 in the Handbook; Wednesday: Convene at 9:30 for the reception of reference committee reports and other business and recess in time to reconvene at 2 p. m., and proceed with the Order of Business scheduled for Thursday as published on page 25 of the Handbook; adjournment at the close of this session unless necessary business requires the House to reconvene on Thursday morning.

Respectfully submitted.

FRANCIS F. BORZELL, Chairman.
E. G. WOOD.
F. S. CROCKETT.
SAMUEL J. MCCLENDON.
LUCIUS F. DONOHOE.

Dr. George W. Kosmak, New York, moved that the report of the reference committee be adopted. The motion was duly seconded and carried, after it was definitely stated that the report carries the instruction that the election of officers would take place on Wednesday instead of Thursday.

The Speaker announced that a two-thirds vote of the House was necessary before the date of holding elections may be changed. He called for a rising vote, which indicated that the date of election was changed from Thursday, December 4, to Wednesday, December 5, by a vote of 110 for to 4 against.

Report of Reference Committee on Sections and Section Work

Dr. William Weston, Chairman, presented the following report, which was adopted on motion of Dr. H. B. Everett, Tennessee, duly seconded and carried:

Your reference committee approves a resolution by the Council on Scientific Assembly and by the Michigan State Medical Society and recommends that a proper amendment to the By-Laws be made to include a new section to be known as the Section on General Practice.

Respectfully submitted.

WILLIAM WESTON, Chairman.
O. H. WEAVER.
HUGH SMITH.
WARREN L. ALLEE.

Report of Reference Committee on Miscellaneous Business

Dr. James R. Reuling Jr., Chairman, presented the following report:

1. Resolutions on Use of Sulfonamides: The resolutions introduced by Dr. C. W. Lane, Section on Dermatology and

Syphilology, regarding the local and general sensitization to sulfonamides was considered. Your reference committee agrees in principle with the purpose of the resolutions and recommends that the Council on Pharmacy and Chemistry use all means at its command to implement the purpose of the resolutions.

2. Resolutions on Minimum Wage Standard: With respect to these resolutions introduced by Dr. F. W. Winslow, New York, your reference committee submits that the House of Delegates of the American Medical Association has always recognized the fact that the American workingman should receive a sufficient wage so that they may all become independent individuals able to pay his or her way in purchasing the necessities of life. Your reference committee recommends that this principle be reaffirmed.

3. Resolution on Proposed International Congress on Tropical Medicine: Your reference committee has changed the last part of that resolution, as follows:

Resolved, That the American Medical Association heartily endorse the proposal of the American Academy of Tropical Medicine that an International Congress on Tropical Medicine and Malaria be held in the United States at an early date and that the American Medical Association join with the American Academy of Tropical Medicine in petitioning the State Department of the United States government officially to sponsor and invite international participation in such a gathering and direct the Secretary of the American Medical Association to advise formally the State Department of this endorsement; and be it further

Resolved, That the Board of Trustees of the American Medical Association be authorized and empowered to appoint a member of the American Medical Association officially to represent this Association at such an International Congress on Tropical Medicine and Malaria.

Respectfully submitted,

JAMES R. REULING JR., Chairman.
STEPHEN E. GAVIN.
HENRY A. LUCE.
LEONARD W. LARSON.
WILLIAM BATES.

On motions of Dr. Reuling, duly seconded and carried after discussion, the first and third sections of the report of the reference committee were adopted.

The second section of the report was tabled on motion of Dr. Arthur J. Bedell, Section on Ophthalmology, seconded by several and carried by a rising vote of 67 to 29.

On motion of Dr. Reuling, duly seconded and carried, the report of the reference committee was adopted as a whole with the exception of the section that was tabled.

Resolutions Rereferred

The Speaker, on motion of Dr. James R. Reuling Jr., New York, duly seconded and carried, received permission to refer the two resolutions presented by delegates from California, previously referred to the Reference Committee on Legislation and Public Relations, to the Reference Committee on Executive Session.

Report of Reference Committee on Medical Care of Veterans

Dr. W. G. Phippen, Chairman, presented the following report:

1. Address of Major General Paul R. Hawley: Your reference committee was asked to consider and comment on the address of Major General Paul R. Hawley.

Your reference committee was impressed with the sincerity and straightforwardness of General Hawley's remarks and feels that the members of the House of Delegates were likewise impressed with the desire and intention to give wounded and sick veterans the best possible medical care. It feels that he is fully cognizant of the deficiencies in the care of veterans after the first world war and some of the causes therefor and is determined to avoid them. The emergence of the medical department from the domination of lay administrators is evidence of this intent. He reasons that if a full time corps of medical officers could not take care of 4,000,000 veterans well, it certainly cannot take care of 20,000,000. He therefore looks to organized medicine to help, and largely on its own terms. He assures us that this in no way implies an entering wedge for the government control of medicine, a situation he would deplore as much as we. It is the intention of the Veterans Administration to attract young physicians returning from the service, both to staff positions on a part time basis and to residencies, and to utilize the services of specialists wherever possible. General Hawley deplores the pressure brought to bear by Congress to force the Veterans Administration to take over army and navy hospitals but fears some new hospitals must be constructed. He is finally convinced however that, if built, they should be built where good medical service is available.

In outpatient care the Veterans Administration must lean most heavily on organized medicine. General Hawley wants the veteran to have free choice of his physician and believes this possible if all physicians participate. One difficulty that he points out is that the veteran is allowed outpatient care at government expense only for a service connected disability, which must be established before the treatment begins. Several plans for this outpatient service are being tried. One in Monmouth County, N. J., focuses around a liaison committee of the county medical society to provide proper screening and proper fees and to see that adequate treatment is provided. In Michigan the Veterans Administration buys service from the Medical Service Corporation. In Kansas the state association acts as agent for the veterans. The Veterans Administration sets up an administrative office in each state. Throughout his address General Hawley expressed absolute confidence in organized medicine and was loud in his praise of what it has accomplished, particularly in the education of doctors.

Your reference committee therefore recommends that the House of Delegates pledge its support to General Hawley in his effort to provide the best medical care under the Veterans Administration.

2. Principles Dealing with Medical Care for Veterans Adopted by Medical Society of New Jersey and Resolution on Medical Care of Veterans: Your reference committee was also asked to consider three resolutions, all pertaining to the medical care of veterans. Those resolutions presented from New Jersey and Oregon we feel have been fully covered in principle by the action on the address of Major General Hawley just considered by the House and need no further action.

The committee begs the indulgence of the House for permission to make a supplementary report concerning the third resolution.

Respectfully submitted,

WALTER G. PHIPPEN, Chairman.
FORREST L. LOVELAND.
JAMES C. SARGENT.
HENRY R. VIETS.
LELAND S. MCKITTRICK.
PARKE G. SMITH.
BRITTON E. PICKETT SR.

The first section of the report of the reference committee, referring to the address of Major General Hawley, was adopted without dissenting vote, on motion of Dr. Phippen, duly seconded and carried.

Dr. Phippen moved that the second section of the report of the reference committee, dealing with two resolutions on medical care of veterans, be adopted. The motion was duly seconded and carried.

The House, on motion duly made, seconded and carried, recessed at 11 a. m. to reconvene at 11:30 a. m.

The Speaker called the House to order at 11:45 a. m.

Communication Rereferred

The Speaker, on motion of Dr. Arthur J. Bedell, Section on Ophthalmology, duly seconded and carried, rereferred to the Judicial Council the appeal from the Medical Director of the Northern Permanente Foundation from the action of the Washington State Medical Association which had been referred to the Reference Committee on Legislation and Public Relations.

Report of Reference Committee on Medical Education

Dr. Fred M. Smith, Chairman, presented a report, which on motion, duly seconded and carried, was adopted section by

section and as a whole as amended. The amended report reads as follows:

1. The report of the Council on Medical Education and Hospitals as it appears in the Handbook of the House of Delegates, pages 139-162. Your reference committee approves this report.

2. The Supplementary Report of the Council on Medical Education and Hospitals recommending support of the proposals in the report of Vannevar Bush to the President: Your reference committee also approves this report with the addition of the following paragraph:

"Of the legislation thus far introduced into Congress, the Magnuson bill (S. 1285) most nearly follows the recommendations of the Bush report, especially as regards the method of appointment and organization of the National Research Foundation. The recommendations of the Bush report and the provisions of the Magnuson bill on this question give more promise of achieving the desired ends than do the provisions of other bills before Congress."

3. Resolution on Asphyxial Accidents: Regarding the resolution concerning instruction of doctors of medicine in the treatment of asphyxial accidents, your reference committee approves the resolution in principle and recommends that it be implemented by sending reprints of the survey report by the Council on Physical Medicine of the American Medical Association published in THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION on Oct. 6, 1945 to the heads of the physiology, surgery and, if possible, obstetric departments of approved medical schools as well as to hospitals approved for internship and residency training.

4. Resolution on Hospital Staff Meetings: Regarding the resolution concerning the frequency and content of hospital staff meetings, your reference committee recommends that the wording of the resolution be changed as follows:

"Resolved, That the frequency of staff meetings in a hospital should be determined by the needs of the hospital itself and in conformity with the regulations set forth by the House of Delegates in the 'Essentials of a Registered Hospital' reading as follows:

"Staff meetings should be held for the review of the work of the hospital, the discussion of results, the report of autopsies, pathologic studies, presentation of papers and such other matters as concern the professional work of the hospital."

5. The recommendation of the Council on Medical Service and Public Relations that ". . . the American Medical Association request the Procurement and Assignment Service and the Army, Navy and Public Health Service to ascertain at the earliest time the future policy relating to the deferment of medical officers to serve as residents . . .": Your reference committee finds that this has already been carried out and the policies of these governmental agencies were published in THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, Nov. 17, 1945, page 808, under the title "Reconversion of the 9-9-9 Program."

6. The further recommendation of the Council on Medical Service and Public Relations for ". . . the more prompt approval of hospitals for residencies . . . and for arrangements to provide . . . temporary approval until formal inspections can be made": Your reference committee finds that this has been receiving the attention of the Council on Medical Education and Hospitals, which is developing a plan to meet these ends in collaboration with the Advisory Board for Medical Specialties and the various American boards in the specialties. It approves of the recommendation.

7. Resolution on Early Return of Physicians and Medical Students Now in Military Service: Your reference committee approves this resolution with the following modified wording:

"Resolved, That the American Medical Association and its official representatives continue to support strongly such programs as may be desirable to assure not only the early return of medical veterans to civilian practice but also the early return from military service of qualified medical and premedical students whose training was interrupted by induction into the armed forces. The strongest efforts directed toward the deferment of qualified premedical students should also be continued."

8. Resolutions on Appointment of Committee for the Studying of Nursing Problems and Education: Your reference committee approves the resolutions with the following rewording:

"Resolved, That the activities of the Council on Medical Education and Hospitals of the American Medical Association, collaborating with the National Nursing Council for War Services, the Special Committee on Accrediting of the National League of Nursing Education, the National Organization of Public Health Nurses and the National Association of Practical Nurse Education, be continued and that there be carried out a joint exploration into the problem of nursing education, establishment of national standards in nurse education, definition of the aims to be sought in nursing education and the level of professional competence most desirable among nurses; and be it further

"Resolved, That the Board of Trustees of the American Medical Association give consideration to lending financial assistance in the furthering of these goals, especially as regards the establishment of acceptable national standards for schools of nurse education."

Respectfully submitted,

FRED M. SMITH, Chairman.
THOMAS S. CULLEN.
GEORGE W. KOSMAK.
LEON J. MENVILLE.
A. W. ADSON.

Proposed Amendments to By-Laws, Chapter XV

Dr. A. A. Walker, Alabama, presented the following proposed amendments to the By-Laws, which were referred to the Reference Committee on Amendments to the Constitution and By-Laws:

In order to make effective the recommendation of the Council on Scientific Assembly creating a Section on General Practice, which recommendation has received the approval of this House, the following amendments to the By-Laws are hereby proposed: Change chapter XV, section 1, subdivision 1, to read "Internal Medicine." Change chapter XV, section 1, subdivision 17, to subdivision 18, and insert a new subdivision 17 to read "General Practice of Medicine."

Resolutions on Health Legislation Beneficial to the People

Dr. H. H. Bauckus, New York, presented the following resolutions, which were referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, It is the earnest desire of the medical profession of this country to provide better health care for the American people and improve health facilities and standards, therefore be it

Resolved, That the following principles for a health legislation program be adopted:

1. Establishment in the President's cabinet of a Secretary of Public Health and Medical Welfare, who shall be selected from the ranks of actively practicing physicians and under whose jurisdiction every federal bureau and office whose duties are related to health and medical welfare shall be grouped;

2. Encouragement of medical and other scientific research and study for the continuous improvement of medical care by government grants-in-aid;

3. Provide federal or state loans or guaranties of private loans for the expansion of hospital and educational facilities, the operation of same to be entirely supervised, controlled and carried on by those who own such facilities and by the medical profession;

4 (*a*). Establish statewide voluntary nonprofit health care programs, in every state, based on the free choice of purveyers of health care; such programs shall act as a service plan to all in groups classified as within a special income level as determined by the plan in each state or regional unit; as an indemnity plan for those classified as above that income level by each state or regional unit; as a service plan to the indigent and semi-indigent by contractural arrangement for payment of charges from county, state or federal funds; as a service plan for all other governmental categories eligible for health care; as a service plan for all physicians' services to veterans of the armed forces for all illnesses or disabilities eligible under the law;

4 (*b*). Any further federal or state programs for expansion of medical service to be developed within the structure of the before described program;

4 (*c*). National cooperation with the proposed plans of Major Gen. Paul R. Hawley of the Veterans Administration in the therapeutic administrations to veterans for service connected disabilities. Also for the development of veteran facilities as teaching hospitals under the medical direction of civilian consultants in the respective specialized medical departments;

4 (*d*). All statewide medical care programs on either a service or indemnity care basis shall be incorporated under special state enabling acts or by already existing state statutes relating to nonprofit producers' cooperatives. This will provide for either a prepayment or a reimbursement contractural service;

4 (*e*). Group cooperation and reciprocity, on a national level, by all voluntary state medical and hospital care (Blue Cross) programs should be accomplished;

5. We suggest establishment in communities where feasible of a public information and educational service adequately financed, to prevent illness, to provide hygienic and sanitary measures and to inform where to go to seek help when ill or injured;

6. The function of government, federal and state, should be to encourage and assist, rather than to compete with, reputable voluntary health insurance plans; and be it further

Resolved, That every state medical society be invited to study, adopt and activate these principles on the state level and that they be submitted to the Council on Medical Service and Public Relations of the American Medical Association for immediate consideration as a pattern for a national health program.

Resolution on National Physicians Committee

Dr. G. Henry Mundt, Illinois, presented the following resolution, which was referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, The members of this House of Delegates as well as physicians throughout the United States are cognizant of the increasingly effective work of the National Physicians Committee for the Extension of Medical Service in familiarizing the public with the values, methods and achievements of American medicine; therefore, be it

Resolved, That we reaffirm our approval of the activities of the National Physicians Committee and commend the Board of Trustees and the management of this institution for the effectiveness of their efforts.

Resolution on Removal of Sex Discrimination from Medical Students

Dr. Emily D. Barringer, New York, presented the following resolution, which was referred to the Reference Committee on Miscellaneous Business:

WHEREAS, In these postwar days, the equality of the sexes is one of the fundamental concepts of freedom on which a true and lasting peace may be built and so was voiced at the San Francisco Conference; and

WHEREAS, There is a recognized shortage of physicians to meet the postwar needs; and

WHEREAS, The quota of women students is still limited in the medical schools and women physicians are still approximately only 5 per cent of the total number of licensed physicians; and

WHEREAS, In a recent article in THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION statistics show that a high percentage of women physicians make use of their education and continue active in their medical work; therefore be it

Resolved, That the American Medical Association go on record as approving the removal of sex discrimination from the medical student and that henceforth a woman medical student be judged purely by her individual qualifications.

Resolutions on Modern Medical Public Relations

Dr. C. C. Sherburne, Ohio, presented the following resolutions, which were referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, The economic trends of medicine point to an increasing effort on the part of organized minorities to regiment medicine; and

WHEREAS, The medical profession must take the public more and more into its confidence and tell all the people what medicine has done, is doing and intends to do for the public good; and

WHEREAS, Organized medicine urgently needs full time public relations activity not only on a national level but in every state of the Union to inform the public properly of its ideals and programs; therefore be it

Resolved, That the president and other officers of each state medical society use their influence to create a well financed public relations program in every state medical association at the earliest possible moment; and be it further

Resolved, That the Council on Medical Service and Public Relations of the American Medical Association be instructed by the House of Delegates of the American Medical Association to offer sustained leadership to state medical associations in their public relations programs, especially through the example of an immediate and outstanding program of medical public relations on a national level employing newspapers, commercial radio and movies, and all other modern mediums to bring medicine's glorious story to the American people.

Resolution Rereferred

The Speaker, with the consent of the House, rereferred the resolution introduced by Dr. G. Henry Mundt to the Reference Committee on Miscellaneous Business instead of the Reference Committee on Legislation and Public Relations, to which it had previously been referred.

Resolutions on Formation of a National Health Congress

Dr. E. S. Hamilton, Illinois, presented the following resolutions, which were referred to the Reference Committee on Legislation and Public Relations:

WHEREAS, Proposed federal legislation to socialize health service would regiment doctors of medicine, dentists, hospitals, nurses, pharmacists and the people whom they serve; and

WHEREAS, The medical and allied health professions are intensely interested in bringing the greatest amount of health protection to all people in this nation, through those means which will both preserve and extend the high standards of health now prevailing in this country; and

WHEREAS, In order to preserve quality health care for the people of this nation, each of these groups favors voluntary nonprofit prepayment plans instead of health services under compulsory governmental control; and

WHEREAS, While each of the groups in the health field has its own organization, working independently for the preservation of the American system of health care, an overall body or council is necessary to integrate the necessary collective thinking and activity of all organizations or units; and

WHEREAS, A serious and immediate need exists to develop a working liaison or congress of all agencies in the health field to secure the most effective results of action and public education; therefore be it

Resolved, That this body recognizes the need for a National Health Congress representative of the medical, dental, hospital, nursing pharmaceutical and allied professions, and that it approves the creation of such a coordinating body; and be it further

Resolved, That the Council on Medical Service and Public Relations of the American Medical Association be instructed by the House of Delegates of the American Medical Association to take the initiative in bringing together the interested groups to organize and incorporate immediately a National Health Congress, this congress to undertake to bring to all the people of this nation the complete benefits of modern medical-dental science and the finest hospital facilities, to arrange for budgeting the cost of such services at monthly rates within the financial means of all Americans through voluntary, nonprofit health plans and to work speedily for the institution of such voluntary nonprofit health plans in those places or localities where they do not now exist.

The House recessed at 12:30 p. m. to meet in Executive Session at 2 p. m.

Tuesday Afternoon, December 4

The House of Delegates was called to order at 2 p. m. by the Speaker, Dr. H. H. Shoulders.

Report of Reference Committee on Rules and Order of Business

Dr. F. F. Borzell, Chairman, presented the following report, which, on motion of Dr. Robert E. Schlueter, Missouri, duly seconded and carried, was adopted:

Resolved, that the House now go into executive session to receive the report of the Reference Committee on Executive Session; and further be it

Resolved, that in addition to the accredited delegates and members of this House of Delegates the following may be in attendance: all accredited Fellows of the American Medical Association, officers, executive secretaries, lay secretaries who are approved by their accredited representatives, and editors of state and county societies, all others to be excluded.

Executive Session

The Sergeant-at-Arms polled the House, and after a short recess the House went into Executive Session.

Report of Reference Committee on Executive Session

Dr. Walter F. Donaldson, Chairman, presented the following report:

Three resolutions were referred to the committee, the first being a resolution regarding the activities of employees of the American Medical Association.

1. Resolution on Activities of Employees of American Medical Association: Your reference committee, aided by the comments of those who attended its hearing and by careful subsequent consideration, respectfully submits the following as its reaction to said resolution: Article 2 of the Constitution of the American Medical Association in twenty words sets forth the objects of the Association as being to promote the science and art of medicine and the betterment of public health. Section 1 of chapter VI of the Association's By-Laws states that the Board of Trustees shall appoint a General Manager and an Editor of THE JOURNAL and such assistants as may be necessary and shall determine their salaries and the terms and conditions of their employment. Therefore there seems to be little doubt that this resolution, if adopted by the 1945 House of Delegates, would, in effect, express a definite criti-

cism of the administration by the current Board of Trustees, whose multiple, year-round activities involve interim supervision and responsibilities for the success or failure of the policies and plans authorized and approved by each succeeding House of Delegates. Never has this Association stood in greater need of harmony between its legislative and administrative bodies than in the coming year 1946. Your Reference Committee on Executive Session is confident that the Board of Trustees is devoted to and capable of developing and maintaining the most efficient organization possible in the solution of the Association's present pressing problems, provided it has the support of the membership. To this end we would call to the attention of the entire membership of the Association that in the interim between meetings of the House of Delegates the Board of Trustees is an ever open and easily approached avenue for criticism or complaint. We also urge each member of the House of Delegates and others present to make it clear to their constituency that Fellows of the Association will always find warm welcome should they care to attend the meetings of the House of Delegates. Your committee heartily recommends this in order that the members throughout the constituent associations may be properly impressed with the democratic structure and processes of the House of Delegates. Your reference committee recommends to the House that this resolution be not approved.

2. Resolutions on Spokesman for American Medicine and Resolution on Council on Medical Service and Public Relations:

Your reference committee has taken the liberty of considering these resolutions jointly, which deal with expansion of the functions and the implication of the already multiple duties and activities of the Council on Medical Service and Public Relations. The present duties of this council are clearly defined in the By-Laws of the Association, which, of course, are at all times subject to amendment. The members of your reference committee have learned through interviews with members of similar councils of constituent state medical associations that it has been a common experience that the magnitude of the subjects assigned to each such council, none of which have been in existence more than two years, has tended to create a certain degree of confusion strongly suggestive that more time will be required for crystallization of activities within the limitations of time available to the personnel of such councils. The members of our committee learned at its hearing this morning, from a former and the current chairman of the Council on Medical Service and Public Relations, that the Board of Trustees of the American Medical Association has throughout shown a completely cooperative attitude and has been generous in the provision of funds and of personnel. It learned too from those who presented the resolutions that their basic objective was and is to encourage the Association and to assist in every way possible in bringing about not only effective but timely action by this new and important council.

With these ideas in view, your reference committee unanimously recommends that the resolutions dealing with the future of the Council on Medical Service and Public Relations be not approved.

Respectfully submitted,

Walter F. Donaldson, Chairman.
Edward Jelks.
James R. McVay.
William R. Brooksher.
Thomas P. Murdock.
W. Clark Bailey.
Allen H. Bunce.

Dr. Donaldson moved that the first section of the report of the reference committee, disapproving the Resolution on Activities of Employees of the American Medical Association, be adopted, and the motion was seconded by Dr. A. A. Walker, Alabama. After discussion by several, it was moved by Dr. James P. Kerby, Utah, duly seconded and carried by a vote of 88 to 48 that the vote on the adoption of this section be by secret ballot.

The Speaker requested the tellers to spread the ballot for a vote on the adoption of the first section of the report of the reference committee. The tellers spread the ballot, the Speaker declared the ballot closed and the Secretary announced that 166 votes had been cast, of which 106 were for the adoption of the first section of the report of the reference committee and 60 were opposed.

The Chairman ruled that the first section of the report of the reference committee, disapproving the Resolution on Activities of Employees of the American Medical Association, had been adopted.

It was moved by Dr. Donaldson that the second section of the report of the reference committee, disapproving two resolutions dealing with the functions of the Council on Medical Service and Public Relations, be adopted. Dr. L. S. Goin, California, desired to enter a motion for the amendment of one of the resolutions, which amendment he read and moved its adoption. The motion was seconded by Dr. John W. Cline, California. After discussion, the Speaker ruled that the House hear Dr. Donaldson's report before considering any amendment.

Dr. Donaldson completed the reading of the second section of his report and moved its adoption. Dr. L. S. Goin moved that this be rereferred to the reference committee, and the motion was seconded and carried after discussion by several and this section of the report of the reference committee was rereferred to it.

Report of Reference Committee on Legislation and Public Relations

Dr. E. S. Hamilton, Chairman, presented the following report:

Assigned to the Committee on Legislation and Public Relations was the message of President Harry Truman submitting a national health program on November 19 and the latest version of the Murray-Wagner-Dingell bill submitted to the Senate and the House of Representatives on the same day.

The President's program includes five features.

1. The first is the proposal to grant federal aid for the building of hospitals and health centers throughout the nation. The Board of Trustees of the American Medical Association has approved the principles of the Hill-Burton bill, and the committee recommends that the House of Delegates endorse this action of the Board as being within the program of constructive action toward improving the health of the American people.

2. The second recommendation of President Truman is for an extension of maternal and child health services. The Murray-Wagner-Dingell bill would make this effective by increased grants in aid through the Children's Bureau to the individual states. A much more far reaching proposal is that of the Pepper bill for maternal and child health. These programs would tend to turn over to a federal agency the medical care of every mother in childbirth and of the children of the United States up to the age of 21 years. This constitutes an insidious attempt to turn over to the federal government functions that are definitely those of the medical profession. In this connection the reference committee urges that the House of Delegates recommend again the removal of the Children's Bureau from the Department of Labor to the United States Public Health Service in the Federal Security Agency. The American Medical Association has always favored proper aid for the extension of maternal and child health services where the need can be shown.

3. The third feature of the President's message dealt with the development of the National Research Foundation. The Committee on Postwar Medical Service, the Council on Medical Education and Hospitals and the Board of Trustees of the American Medical Association have approved the principles of the Magnuson bill, which would place the control of the National Research Foundation under a scientific board of directors rather than under an individual director to be appointed by the President. Your reference committee approves the action taken by those official bodies of the American Medical Association and urges that the House of Delegates support their recommendation.

4. The fifth proposal in the President's program is compensation for the loss of earnings due to sickness. The American Medical Association through its House of Delegates has consistently favored such insurance. Your reference committee recommends that the House of Delegates again register its approval of such action.

5. Finally, the fourth proposal of President Truman and the main feature of the Wagner-Murray-Dingell bill is the creation of a federal system of compulsory sickness insurance. In commenting on this proposal your reference committee recommends that the House of Delegates endorse the following statement from the editorial published in THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, Dec. 1, 1945:

> No one will ever convince the physicians of the United States that the Wagner-Murray-Dingell bill is not socialized medicine. By this measure the medical profession and the sick whom they treat will be directly under political control. By this measure the great system of private hospitals and community hospitals that has grown up in our country will depend for their continued operation on funds paid to them by a federal government agency. By this measure the philanthropic efforts for the care of the sick, which have been the pride of our nation, will be forever deterred. Through this measure competent young men who would enter the medical profession will be forced to seek other fields of action still remaining under our democracy which still permit the exercise of individual initiative and freedom of thought and action. By this measure doctors in America would become clock watchers and slaves of a system. Now, if ever, those who believe in the American democracy must make their belief known to their representatives, so that the attempt to enslave medicine as first among the professions, industries and trades to be socialized will meet the ignominious defeat it deserves.

Your reference committee recommends that the House of Delegates express official disapproval of section 4 of the Wagner-Murray-Dingell bill for the following reasons:

1. The Wagner-Murray-Dingell bill is founded on the false assumption that solution of the medical care problem for the American people is the panacea for all of the troubles of the needy.

2. This is the first step in a plan for general socialization not only of the medical profession but of all professions, industry, business and labor.

3. Positive proof exists from experience in other countries that inferior medical service results from compulsory health insurance.

4. A program such as outlined is enormously expensive. It will result in greatly increased taxes for the entire population of the United States.

5. Voluntary prepayment medical plans now in operation in many parts of the United States and which are rapidly increasing in number will accomplish all the objects of this bill with far less expense to the people, and under these plans the public will receive the highest type of medical care without regimentation.

Respectfully submitted,

EDWIN S. HAMILTON, Chairman.
LLOYD NOLAND.
JOHN J. MASTERSON.
EDWARD L. BORTZ.
RAYMOND L. ZECH.

Dr. Hamilton moved adoption of the first section of the report of the reference committee, dealing with President Truman's message on the proposal to grant federal aid for the building of hospitals and health centers, and the motion was duly seconded and carried unanimously.

It was moved by Dr. Hamilton that the second section of the report of the reference committee, concerning an extension of maternal and child health services, be adopted, and the motion was duly seconded. After discussion, it was moved by Dr. Arthur J. Bedell, Section on Ophthalmology, seconded and carried, that this section of the report of the reference committee be rereferred to it.

On motion of Dr. Hamilton, seconded and carried, the third section of the report of the reference committee, dealing with the development of the National Research Foundation, was adopted.

Dr. Hamilton moved, and the motion was seconded, that the fourth section of the report of the reference committee, with respect to President Truman's message regarding compensation for the loss of earnings due to sickness, be adopted. On motion of Dr. Francis F. Borzell, Pennsylvania, seconded and carried, this section of the report of the reference committee was rereferred to it.

The fifth section of the report of the reference committee, recommending disapproval of section 4 of the Wagner-Murray-Dingell bill, was adopted on motion of Dr. Hamilton, seconded and carried.

On motion of Dr. Francis F. Borzell, Pennsylvania, seconded and carried, the House rose from Executive Session.

Tuesday Afternoon—Continued

On motion of Dr. Walter E. Vest, West Virginia, seconded and carried, the House reconvened in regular session.

Report of Reference Committee on Hygiene and Public Health

Dr. Felix J. Underwood, Chairman, presented the following report, which on motions of Dr. Underwood, duly seconded and carried, was adopted section by section and as a whole:

Your reference committee has considered that portion of the report of the Board of Trustees dealing with the activities of the Bureau of Health Education, as shown in the Handbook, pages 61-68. It notes with satisfaction the excellence of the report. It is in complete accord with the substance of the report and the work done and urges on the Board of Trustees the necessity of furnishing adequate funds to carry on and develop further the program and activities of this Bureau.

1. Present Views of Profession on Social Hygiene:

Your committee has considered the letter of Dr. Ray Lyman Wilbur to Dr. Olin West, under date of November 28, 1945, relative to previous resolutions as to social hygiene (*a*) as adopted in 1917: "1. That sexual continence is compatible with health and is the best prevention of venereal infections; 2. That steps be taken toward the eradication of venereal infections through the repression of prostitution, and by the provision of suitable recreational facilities, the control of alcoholic drinks and other effective measures; 3. That plans be adopted for centralized control of venereal infections through special divisions of the proper public health and medical services; 4. That the hospitals and dispensaries be encouraged to increase their facilities for early treatment and follow-up service for venereal diseases as a measure of national efficiency; 5. That the members of the medical profession be urged to make every effort to promote public opinion in support of measures instituted in accordance with these principles of action in the control of venereal diseases."

(*b*) as adopted in 1942: "First, that the control of venereal disease requires elimination of commercialized prostitution; second, that medical inspection of prostitutes is untrustworthy, inefficient, gives a false sense of security and fails to prevent the spread of infection; third, that commercialized prostitution is unlawful, and physicians who knowingly examine prostitutes for the purpose of providing them with medical certificates to be used in soliciting are participating in an illegal activity and are violating the principles of accepted professional ethics."

Your reference committee is in accord with the declaration of the House of Delegates of the American Medical Association at the annual session in 1917 and again in 1942 and recommends the reaffirmation of these principles and that the public health authorities and the medical profession of the country be entrusted with the responsibility of carrying them out.

2. Resolution on Christmas Seal Drive of National Tuberculosis Association: Your reference committee has considered the resolution presented by Dr. Burt R. Shurly, Michigan, relative to the distribution of the funds secured from the tuberculosis seal sale in Detroit. Except for this resolution and Dr. Shurly's personal remarks, your reference committee is not informed as to any change of policy on the part of the National Tuberculosis Association. It recommends that this resolution be referred to the Board of Trustees for such action as in its judgment is appropriate.

3. Resolutions on Transfer of Children's Bureau: Your reference committee has considered the resolution presented by Dr. O. W. H. Mitchell, New York, relative to the transfer of the health services of the Children's Bureau to the U. S. Public Health Service.

It is the opinion of your reference committee that the Children's Bureau of the United States Department of Labor should be transferred to the Federal Security Agency until such time as the Congress creates a national department of health with a qualified physician as its director with cabinet status, and it recommends that the House of Delegates of the American Medical Association go on record accordingly.

Respectfully submitted,

FELIX J. UNDERWOOD, Chairman.
WARREN F. DRAPER.
D. F. CAMERON.
WALTER E. VEST.
CREIGHTON BARKER.

Report of Reference Committee on Medical Care of Veterans

Dr. Walter G. Phippen, Chairman, presented the following report, which on motion of Dr. Phippen, seconded and carried, was adopted:

Your reference committee has thoroughly discussed the Resolutions on Future Medical Care of Veterans introduced by Dr. James C. Sargent, Wisconsin, and offers the following substitute resolution:

Resolved, That the House of Delegates of the American Medical Association at this time reaffirms its long established opposition to extending the benefits under the Veterans Administration to encompass those disabilities obviously not service connected.

Respectfully submitted,

WALTER G. PHIPPEN, Chairman.
FORREST L. LOVELAND.
JAMES C. SARGENT.
HENRY R. VIETS.
LELAND S. MCKITTRICK.
PARKE G. SMITH.
BRITTON E. PICKETT SR.

Reference Committee on Reports of Officers

Dr. Floyd S. Winslow, Chairman, presented the following report, which on motions of Dr. Winslow, duly seconded and carried, was adopted section by section and as a whole:

1. Address of Speaker of House of Delegates, Dr. H. H. Shoulders: Your reference committee views with commendation and profound appreciation the thoughts of our Speaker in reference to the ideals of medicine. He sounded a refreshing note in reviewing the impelling motif which has dominated this organization for nearly a century.

He particularly stresses the warning that in the efforts of the profession to stave off political encroachment it should not lose this impelling motif or shirk its responsibility for continuing the preservation of the best in American medicine.

2. Address of President-Elect Roger I. Lee: Dr. Lee, in his own inimitable style, delivered an address in which he gave utterance to his observations concerning organized medicine in America resulting from thirty years of continued activities in many capacities. Our sincere appreciation of his words can best be expressed by the recommendation that every member of the House read carefully his address when it appears in printed form.

Your reference committee recommends that this address be called particularly to the attention of the state and county societies. It recommends that they make use of their rights and duties as members of this democratic organization and instruct their delegates that action of this House of Delegates represents the majority opinion from the doctors of our country. It concurs with Dr. Lee's opinion and recommends to the House of Delegates the authorization of an ad interim meeting.

3. Address of President Herman L. Kretschmer: Your reference committee recommends particularly to the House of Delegates the constructive address of the retiring President, in which he presents matured views on policy issuing from his recent experience as President and his long prior services as an officer of the Association. The specific recommendations made by Dr. Kretschmer are dealt with as follows: (1) Your reference committee approves his statements on the subject of regimentation of the practice of medicine.

(2) His suggested and well rounded plans regarding programs of county medical societies meet with the approval of the reference committee and it agrees with Dr. Kretschmer that more physicians should actively participate in the work of county medical societies and it recommends that his suggestion be brought to the attention of county and state medical societies.

(3) This reference committee recognizes the problems referred to by Dr. Kretschmer concerning availability of roentgenologic studies, but it believes that his statement should be clarified as follows: "With reference to the President's remarks about the desirability of surrendering to patients possession of films employed in x-ray examinations, the reference committee would point out that the Principles of Medical Ethics requires that 'in their consultation, the benefit to be derived by the patient is of first importance.' Your reference committee believes that adherence to this dictum will adequately protect the interests of patients who are referred to a radiologic consultant for examination by one physician and who later change to another attending physician. The American College of Radiology has promulgated principles for the guidance of all radiologists recommending that, when a patient changes the attending physician, the radiologist should freely transmit the result of his examination to the second doctor. Great harm would be done and disservice to the patient would result if, in practice, patients were given the possession of x-ray films which are the legal property of the radiologist or institution in which they were produced. In actual experience, patients who obtain possession of such clinical records too often take them to an irregular practitioner who is unqualified to interpret them or who may use them to the patient's own injury by reading into them nonexistent pathologic conditions. Any competent physician is entitled to inspect x-ray films used in an examination of his patient regardless of who ordered the examination. It should be emphasized that the roentgenologist considers it ethically obligatory to furnish reports and, as requested, to lend films to the physician currently treating any patient."

(4) Your reference committee decries the exploitation of the hormones as brought up by our President. It wishes to emphasize the necessity of all therapy being based and established on scientific facts and not on claims of the manufacturers and their agents.

(5) Your reference committee emphasizes the recommendation in the President's address that the public be educated to understand that the use of animals is inseparable from the modern practice of medicine and indispensable to progress in the control and alleviation of disease. It suggests, therefore, that the term "animal experimentation" with its unfortunate connotations be replaced with the term "utilization of animals in medical instruction, research, diagnosis and therapy."

(6) As lack of precise knowledge of the pharmacologic action of marihuana delays legal enactment possibly needed and creates confusion in medical practice, it is considered urgent that studies and actions of the effects of the drug be carried to early completion.

(7) Experience shows that it is necessary that steps be taken to maintain an uninterrupted supply of personnel for medicine and its allied sciences during national emergencies.

(8) Your reference committee recommends encouragement of further study in the field of chronic illness.

(9) The subject of returning medical officers is being handled as a problem of professional rehabilitation.

Respectfully submitted,

FLOYD S. WINSLOW, Chairman.
THOMAS K. LEWIS.
DEERING G. SMITH.
HAROLD W. SMITH.
GEORGE H. CURFMAN.

Report of Reference Committee on Postwar Planning

Dr. Charles H. Phifer, Chairman, presented the following report, which on motion of Dr. Phifer, duly seconded and carried, was adopted section by section and as a whole:

1. Report of the Committee on Postwar Medical Service: In reviewing the report of the Committee on Postwar Medical Service, your reference committee was impressed at once not only by the plan and scope of the work of this committee but also by the thoroughness and detail of its efforts. It would commend to the delegates and to all members of this Association the careful reading of this report and particularly the published proceedings of this committee which have appeared from time to time in the columns of THE JOURNAL.

These studies will present the accumulation of a mass of information and data which should contribute in a large measure to the ultimate solution of many of the pending and vexing problems confronting us. We note with satisfaction the liaison effected with other national organizations and governmental agencies concerned with many of these same problems.

Your reference committee cannot commend too highly this type of constructive planning and takes this opportunity to compliment and felicitate the gentlemen who have given so freely of their time and great abilities to do this work. The committee has displayed mature comprehension and understanding in the handling of numerous confusing and controversial subjects.

Your reference committee desires also to congratulate the Board of Trustees for its wisdom and judgment in appointing as personnel with this committee men of the caliber and proved competence who make up its membership. It hopes and would respectfully suggest that this House of Delegates express its appreciation and full support of the work the committee is doing. Your reference committee recommends to the House of Delegates the continuation of this Committee on Postwar Medical Service at the pleasure of the Board of Trustees.

2. Conditions in the Philippines: Your reference committee desires to state that after carefully reviewing the special report of Dr. James E. Paullin to the Board of Trustees in reference to the tremendous destruction of hospitals, university buildings, medical schools, libraries and churches in the Philippine Islands it is deeply impressed with the seriousness of the situation and presents for your approval the following resolutions:

WHEREAS, The Board of Trustees of the American Medical Association implemented a special health survey of the Philippine Islands; and

WHEREAS, This investigation discloses the serious need for surgical supplies, x-ray apparatus, drugs, chemicals and other necessary equipment; and

WHEREAS, The American Medical Association feels morally obligated to the members of the constituent medical society; be it

Resolved, That the House of Delegates of the American Medical Association request the Surgeon General of the U. S. Public Health Service and the Federal Security Administrator to use their influence in having any supplies or property not being used by our hospitals in Manila given to the civilian hospitals in the Philippine Islands and to the University of the Philippines; and be it further

Resolved, That a copy of these resolutions be sent to the Surgeon General of the U. S. Public Health Service, the Federal Security Administrator, Hon. Paul D. McNutt, the high commissioner of the Philippine Islands and the secretary of the Philippine Medical Association.

3. Resolution on Recognition of Physicians Who Served on Procurement and Assignment Service in Various States: Your reference committee considered the attached resolution presented by Dr. William Stovall, Wisconsin. The committee would like to restate for the information of all physicians that the idea of an organization like the Procurement and Assignment Service for Physicians, Dentists and Veterinarians was initiated by the the Committee on Medical Preparedness of the American Medical Association created by the House of Delegates. It was created by the executive order of the President of the United States on the recommendation from this body. It represented an exceptional and singular achievement in the war effort. It operated quite apart from the other functions of Selective Service. These professions were the only divisions of our civilian society accorded the right and privilege of processing its own men for military service. This was an outstanding voluntary service, and those physicians who served in the various capacities in this office did so unstintingly and unselfishly. It is the opinion of your reference committee that suitable recognition of these services will be forthcoming from the proper government authorities. Your reference committee recommends disapproval of this resolution.

4. Report of Section on Placement of Medical Officers of Council on Medical Service and Public Relations:

(*a*) Intern Resident Policy: Your reference committee has information that the recommendation in the resolution of the Council has been accomplished since it was adopted on October 19-20 by the Council.

The Vice Speaker assumed the chair.

(*b*) Payments Under Public Law 346: "It is recommended that all discharged medical officers be given terminal leave pay at the termination of their active duty and prior to the expiration of such accrued leave as they may have, thus enabling them to participate immediately in the benefits provided by Public Law 346 (78th Congress, G. I. Bill of Rights). Such a procedure will enable the returned medical officer to commence immediately his training in hospitals or medical schools after leaving the armed services." Your reference committee recommends the approval of the recommendation of the Council on this subject.

(*c*) Approved Hospital Residencies: Your reference committee is informed that the Council on Medical Education and Hospitals has endorsed this problem and it recommends its approval.

(*d*) The Bureau of Information: Your reference committee recommends approval of the recommendation of the Council with respect to the Bureau of Information.

"Each state medical society should be urged to establish an information service. This state information service should collect from various public and private agencies data relating to medical facilities, medical personnel or medical needs and other information concerning medical care within the state. This information service should at all times be in a position to furnish information concerning areas in need of physicians and a complete picture of the medical facilities, physical and economic aspects of any community within the state."

Your reference committee also recommends approval of the Council's recommendation regarding establishment of information services by constituent state medical associations.

5. Resolutions on Expediting the Return of Physicians on Duty with the Military Forces, Resolution on Prompt Discharge of Medical Officers and Resolutions on Earliest Possible Release of Physicians from Military Service: Your reference committee has received these three resolutions, the first one from Dr. Frank E. Reeder, Michigan, the second from Dr. Ivan Fawcett, West Virginia, and the third from Dr. C. R. Keyport, Michigan. As the figures contained in these resolutions are somewhat out of date, it is the opinion of your reference committee that these figures should be deleted, the three resolutions combined and acted on as one. Your reference committee is heartily in accord with the principles contained in all the resolutions, namely that those medical officers in our military forces who are not vitally needed should have immediate consideration for release, and an effort should be made promptly to initiate and consummate their immediate separation.

Resolved, that a copy of this recommendation be sent to the Secretary of War, the Secretary of the Navy, the Surgeon General of the Army, the Surgeon General of the Navy, the Surgeon General of the United States Public Health Service and the Federal Security Administrator.

Respectfully submitted,

CHARLES H. PHIFER, Chairman.
J. STANLEY KENNEY.
LEO G. CHRISTIAN.
F. J. L. BLASINGAME.
HARRY V. PARYZEK.
B. R. KIRKLIN.
J. MORRISON HUTCHESON.

Telegram on Deferment of Prospective Medical Students

Dr. Olin West, Secretary, presented the following telegram received from Drs. Harvey Stone, Baltimore, and Frank H.

Lahey, Boston, which was referred to the Reference Committee on Medical Education:

We suggest the adoption of this statement by the House of Delegates.

This society, in common with all other medical groups, views with apprehension the effects of the present regulation of Selective Service which makes no provision for the deferment of young men inclined for entrance into premedical education. It believes that continuation of this policy will inevitably result in a lessened production of doctors when more rather than less will be urgently needed.

At this time when veterans' needs, increased demands of military establishments for more doctors and greatly intensified concern with national health exists, the present program of Selective Service of cutting down on the supply of doctors is indefensible.

We therefore urge that the Military Affairs Committee of the Senate (House of Representatives) take immediate steps to correct this situation in the interests of the public welfare.

Report of Reference Committee on Reports of Board of Trustees and Secretary

Dr. Thomas A. McGoldrick, Chairman, presented the following report, which on motion of Dr. McGoldrick, duly seconded and carried, after discussion, was adopted section by section and as a whole:

1. Proper Utilization of Services of Physicians in a National Emergency: This statement was formulated by a committee appointed by the Board of Trustees after giving consideration to a suggestion made by Dr. James E. Paullin with a view to proper utilization of the services of physicians in a national emergency.

2. Celebration of Centennial of the Association: The Board of Trustees suggested that the House of Delegates authorize the speaker to appoint a committee to work with the Board of Trustees in the development of a program for the celebration of the centennial in Atlantic City, and your reference committee recommends that the House of Delegates authorize the Speaker to appoint such a committee.

3. Report of Secretary:

A. Membership: Your reference committee notes with pleasure the gain in membership in spite of the war.

B. Fellowship: The decrease in the number of Fellows was more largely due to the fact that thousands of Fellows were serving with the armed forces in all parts of the world. Your reference committee recommends that this House of Delegates authorize the restoration of the names of all Fellows assigned to active duty if they so request.

C. Activities: Your reference committee notes the splendid way in which the many component bodies of the American Medical Association have dealt with the many problems of the times.

D. Appreciation: Your reference committee notes with deep appreciation the amount and high quality of service rendered by the Secretary. His service deserves special commendation because of the condition of reduced personnel under which his work was performed.

4. Plan of Distribution by the American Red Cross of the Dried Blood Plasma Declared Surplus by the Armed Forces: Your reference committee recommends approval of the plan submitted, which will be published at a later date.

5. Liaison Officers: Your reference committee endorses the commendation of the Board of Trustees for the fine services of the late Col. Charles G. Hutter, M. C., U. S. Army, of Lieut. Col. H. C. Lueth and of Lieut. Col. R. D. Bickel, which were rendered in accord with the highest traditions of medicine and of the U. S. Army. It recommends that the House of Delegates approve these commendations.

6. Date of the San Francisco Session: The dates selected by the Board of Trustees for the San Francisco Session of the Association are July 1-5, 1946. Your reference committee recommends that the House of Delegates approve the place and dates for the 1946 session.

7. Report of Board of Trustees:

A. General Report: A study of the Report of the Board of Trustees as published in the Handbook and of the supplementary report reveals the tremendous amount of work done by this body. It shows the amount of unselfish service to the many duties and responsibilities devolved on them. The very careful management of the income of the Association and the close attention to every expenditure for the protection of our resources should be fully recognized by every member of the medical profession. Your reference committee recognizes that the work of the Board has been performed under abnormal conditions of wartime and particularly with a greatly reduced personnel necessitated by government regulations. It notes with satisfaction the increased circulation of our journals and commends the maintenance of the high quality of the material offered by them.

B. Joint Committee on Physical Fitness: When the Congress of the United States failed to supply the necessary funds, this joint committee was forced to disband. The Board of Trustees recommended that organizations in the individual states cooperate with other agencies in the ultimate formation of a foundation under voluntary auspices to be known as the Keep Fit Foundation.

C. Bureau of Investigation: The work of the Bureau of Investigation by its constant collection and distribution of information has been of inestimable value to the state organizations, physicians, departments of government and the public at large. In 1944 there were 3,000 inquiries on 4,600 separate subjects. Among the leading subjects of inquiry were diabetes "cures," vitamin preparations, so-called "alkalizers," laxatives, cancer "cures" and various products that are advertised over the radio and in the lay press. It is urged that more physicians avail themselves of this valuable source of information.

D (1). Council on Physical Medicine: Your reference committee reads with great interest the report of the activity of the Council during the past year. The amount of work has been very great. The Council has made thirty-two reports, and other devices have been investigated and will be reported on later. Your reference committee noted the cooperation of the Council with the Federal Communications Commission in an effort to solve the problem of electrical energy from diathermy apparatus interfering with radio transmitters. It is expected that all diathermy equipment manufacturers henceforth will maintain the frequency within the limits prescribed and that within a period of probably five years the existing apparatus now held by physicians will be screened or new equipment purchased will be frequency controlled.

D (2). Artificial Respiration: A report of the survey of five years' study of devices and methods for artificial respiration has been completed and is ready for publication. However, since apparatus is seldom on hand in an emergency the Council has cooperated with the American Red Cross in educational activities promoting the manual method of artificial respiration.

E. Council on Foods and Nutrition: During the year this Council published a Handbook of Nutrition which had been prepared under its auspices. This contained the most recently available data on food values and enrichment regulations. It published also a number of reports on the nutritional value of certain foods and the effect of the addition of vitamins to them. From the public health point of view only the addition of vitamin D to milk is justified. One special report of this Council emphasizes the dangers inherent in the use of any chemical preservative in the home canning of foods. Your reference committee highly endorses the aims of this Council to encourage the production of high quality natural foods.

F. Bureau of Exhibits: Your reference committee notes the amount of work performed by the Bureau. The exhibits on fractures, burns and infectious and tropical diseases were demonstrated before many groups of our armed forces. In the selection and preservation of these films, emphasis was placed on their value to the general practitioner. There was an increased demand for motion pictures on the part of the profession. There were sent 575 pictures to 333 meetings, the chief recipients being army camps, medical schools, hospitals and county medical societies. These motion pictures, pamphlets and publications of the Bureau should be drawn to the attention of program committees of the various state societies.

G. American Health Resorts: Your reference committee knows that this committee has resumed its activities and should

become a source of much exact information to the medical profession.

Report of Reference Committee on Postwar Planning

Dr. Charles H. Phifer, Chairman, presented a report, which, as amended, reads as follows:

1. Resolutions on Creation of Committee on Medical Preparedness: Your reference committee recommends that the resolution be referred to the Committee on Military Service, which is to be appointed by the Board of Trustees, for its consideration and action.

2. Position of Surgeon General: It has been brought to the Committee's attention that the position of the Surgeon General in the armed service forces would indicate that full recognition has not been given to the Medical Department of the Army. It is the opinion of the medical profession that in order for the Medical Department to operate efficiently the Surgeon General should be on a higher level and be responsible directly to the chief of staff. Your reference committee concurs in this recommendation and asks that this be approved by the House of Delegates and a copy of the resolution be sent to the Secretary of War and the chairman of the Military Affairs Committee in the House and the Senate.

Dr. Phifer moved the adoption of the first section of the report of the reference committee, concerning Resolutions on Creation of Committee on Medical Preparedness, and the motion was duly seconded. After discussion, Dr. Phifer accepted a suggested amendment and moved the adoption of the first section of the report as amended, and the motion was seconded and carried.

On motion of Dr. Phifer, seconded and carried, the second section of the report of the reference committee, referring to the position of the Surgeon General, was adopted.

The report as a whole, as amended, was adopted on motion of Dr. Phifer, seconded and carried.

NEW BUSINESS

The Speaker resumed the chair and on motion of Dr. Arthur J. Bedell, Section on Ophthalmology, seconded and carried, declared that new business would be eligible for introduction the next morning under the provisions of the report of the Reference Committee on Rules and Order of Business.

On motion of Dr. Francis F. Borzell, Pennsylvania, seconded and carried, the House recessed at 5:20 p. m. to meet at 9 a. m. Wednesday, December 5.

Third Meeting—Wednesday Morning, December 5

The House of Delegates was called to order at 9:25 a. m. by the Speaker, Dr. H. H. Shoulders.

NEW BUSINESS

Resolution on Woman's Auxiliary

Dr. Francis F. Borzell, Pennsylvania, presented the following resolution, which was referred to the Reference Committee on Reports of Board of Trustees and Secretary:

WHEREAS, The object of the Woman's Auxiliary is to aid the American Medical Association in every way requested; and

WHEREAS, The most urgent need at the present time is for widespread dissemination of knowledge concerning the hazards of current medical legislation; therefore, be it

Resolved, That the House of Delegates of the American Medical Association requests the Woman's Auxiliary to use every avenue possible to bring such information to its members and through them to the public.

Motion on Federal Control of Practice of Medicine

Dr. W. W. Mott, New York, presented the following motion, which was referred to the Reference Committee on Reports of Board of Trustees and Secretary:

I believe that this meeting should not adjourn without fulfilling its manifest duty to our fellow citizens, in issuing to them a clear and unequivocal warning of what adoption of a system of federal control of the practice of medicine will mean to them and to their children.

The time is short, and the gates are closing, but the way is still open to them to refuse to sell their American birthright for a mess of alien pottage.

To this end I move that this House of Delegates request the Board of Trustees, through the Council on Medical Service and Public Relations, to implement this warning at once by giving it the widest possible publicity through every available medium.

Report of Reference Committee on Medical Education

Dr. Fred M. Smith, Chairman, presented the following report, which was amended and then adopted as amended on motion of Dr. Smith, seconded and carried. The amended report as adopted reads:

Telegram on Deferment of Prospective Medical Students: The Reference Committee on Medical Education recommends that the House of Delegates of the American Medical Association approve the statement in the telegram sent to Dr. Olin West by Dr. Harvey Stone and Dr. Frank H. Lahey.

Your reference committee further recommends that this resolution be approved by the House of Delegates and copies of it be wired to all members of the Senate and House Committees on Military Affairs, the director of the Office of War Mobilization and Reconversion, the director of Selective Service, the chairman of the Procurement and Assignment Service, the Secretary of War, the Secretary of the Navy and the President of the United States, and that it be given the widest publicity in the press.

Respectfully submitted,

FRED M. SMITH, Chairman.
THOMAS S. CULLEN.
GEORGE W. KOSMAK.
LEON J. MENVILLE.
A. W. ADSON.

Report of Reference Committee on Industrial Health

Dr. William L. Estes Jr., Chairman, presented the following report, which on motions of Dr. Estes, duly seconded and carried, was adopted section by section and as a whole:

1. Report of Board of Trustees Dealing with Report of Council on Industrial Health: The magnificent report of the Council on Industrial Health has received detailed consideration by your reference committee. Its comprehensive coverage of industrial health activities indicates the wise direction and thorough understanding and foresighted vision of those responsible for the work of this council and full realization of the opportunities and obligations of the profession in this ever expanding field of medical endeavor. Your reference committee would particularly commend (1) its belief in the importance of the Council's role in the development and maintenance of satisfactory scientific and cultural relations with Canada and Latin America; (2) that in health activities in industry the physician should be directly responsible to top management and that activities relating to health in industry be centered in and directed through the medical department, and in that connection your reference committee would particularly advise that adequate supervision by the industrial physician be considered imperative.

Your reference committee concurs in the Council's opinion that public industrial hygiene activity should reside in bureaus operated by health departments and that the services performed by these bureaus, the Division of Industrial Hygiene of the U. S. Public Health Service and similar divisions of state and local health departments merit full support of the medical profession.

The formulation of a joint committee of the Council on Medical Education and Hospitals and the Council on Industrial Health seems particularly timely to survey the field of undergraduate teaching in the field of industrial medicine, to encourage refresher courses for physicians and to foster graduate teaching in industrial health to the end that a sound foundation may be laid for the possible eventual recognition of this division of medicine as a specialty.

Your reference committee particularly commends concern for and interest in the return of many disabled persons to profitable employment whereby physical capacity is matched with specific

occupational requirements. It is a matter of gratification that the Council feels one of its most significant contributions to the whole industrial health problem lies in continued study of the rehabilitation problem and the field of industrial health examination.

It is worthy of note that the Committee on Workmen's Compensation of the Council stands ready with dependable aid and guidance in workmen's compensation affairs for state medical associations.

The enlarging scope of the activities of the Council would seem to deserve generous consideration in the amplification of funds allocated to the Council in order to obtain adequate personnel and facilities for the important expansion program in contemplation particularly in field services.

In conclusion, the committee concurs heartily in the belief of the Council on Industrial Health that in no other field are there comparable opportunities to improve scientific medicine and the distribution of medical services and to awaken a real appreciation of the accomplishments of medicine on the part of a very large portion of the total population.

2. Resolutions on Opposition to H. R. 525 and S. 1271: Your reference committee approves these resolutions, recommends their adoption and further recommends that copies of them be sent through proper channels of the American Medical Association to the appropriate committees of Congress.

Respectfully submitted,

William L. Estes Jr., Chairman.
Oliver W. H. Mitchell.
Stanley H. Osborn.
Dwight H. Murray.
James Q. Graves.
James P. Kerby.
Barney J. Hein.

Report of Reference Committee on Amendments to the Constitution and By-Laws

Dr. Carl R. Steinke, Chairman, presented the following report:

1. Proposed Amendments to By-Laws, Chapter XV: In order to make effective the recommendation of the Council on Scientific Assembly creating a Section on General Practice, which recommendation has received the approval of this House, the following amendments to the By-Laws are hereby proposed: Change Section 1 "Titles of Sections of Scientific Assembly," No. 1 to read "Internal Medicine" and change No. 17 to No. 18 and insert a new No. 17 to read "General Practice of Medicine."

Your Reference Committee on Amendments to the Constitution and By-Laws approves of this change in the By-Laws.

2. Supplementary Report of the Council on Scientific Assembly: Your reference committee recommends approval of this report which requests changes in the By-Laws, chapter XV, referring to the sections.

3. A Plan Whereby Medical Students of Approved Medical Schools Can Become Student Members of the American Medical Association: Your reference committee recommends approval of the report of the Board of Trustees in this matter.

4. Resolution on Admission of Medical Staff of Veterans Administration to Fellowship in Association: The resolutions proposing amendments to the Constitution and By-Laws referring to the granting of Fellowship to medical officers of the Veterans Administration, which were referred to the Board of Trustees last year, were given consideration by the Board and were referred by it to the Judicial Council, reported on to the Board of Trustees and by that body referred to the House of Delegates. Your reference committee recommends that in view of the impending reorganization of the Veterans Administration no new policy be adopted until that reorganization is complete.

5. Supplementary Report of Council on Medical Service and Public Relations Dealing with Fellowship: The report of the reference committee on this matter was submitted to the House.

Respectfully submitted,

Carl R. Steinke, Chairman.
Karl S. J. Hohlen.
Thomas A. Foster.
George P. Johnston.
Ross S. McElwee.

The Vice Speaker took the chair.

The first, third and fourth sections of the report of the reference committee were adopted on motions of Dr. Steinke, seconded and carried after discussion. The second and fifth sections were rereferred to the reference committee.

The By-Laws were then amended in accordance with section 1 of the report of the reference committee on motion of Dr. Steinke, seconded and carried.

The Speaker resumed the chair.

Executive Session

The House went into Executive Session on motion of Dr. Arthur J. Bedell, Section on Ophthalmology, seconded and carried.

The Sergeant-at-Arms cleared the House of all but those entitled to remain, and the Speaker declared the House in Executive Session.

Report of Reference Committee on Executive Session

Dr. Walter F. Donaldson, Chairman, presented the following report, which on motion of Dr. Donaldson, seconded and carried after discussion, was adopted:

Resolution on Council on Medical Service and Public Relations and Amendment: Your reference committee has reconsidered the original resolution and has considered the amendment to the original motion submitted to the House of Delegates.

The duties of the Council on Medical Service and Public Relations as outlined in the By-Laws have been reviewed. Your reference committee reviewed the manifold duties of this council as outlined on pages 165 to 180 in the Handbook.

Your reference committee feels that this council is already overwhelmed with work assigned to it that more properly belongs to other committees. Furthermore it believes that this council has done excellent work to date and is to be commended. It feels that the Board of Trustees should clarify the duties of this council. There is evidence that the Council will be assisted materially when the Bureau of Medical Economics is revived.

Your reference committee has been informed that provision has been made by the Board of Trustees to engage public relations counsel.

For the foregoing reasons your reference committee believes that it is unwise to add to the duties of the Council at this time. It further believes that, in the interest of harmony and at such a critical time in American medicine, this is a most inopportune time to consider such resolutions and amendments.

Your reference committee has complete confidence in the Board of Trustees to carry this matter to a successful conclusion. It feels therefore that, for the reasons outlined in the original report of the committee and those outlined here, the resolution and amendments should be disapproved.

Respectfully submitted,

Walter F. Donaldson, Chairman.
Edward Jelks.
James R. McVay.
William R. Brooksher.
Thomas P. Murdock.
Clark Bailey.
Allen H. Bunce.

Report of Reference Committee on Legislation and Public Relations

Dr. E. S. Hamilton, Chairman, presented the amended portion of the report of the reference committee on the message of President Truman, which was adopted on motion of Dr. Hamilton, seconded and carried. The report of the reference committee on the message of President Truman as amended and finally adopted reads:

Assigned to the Committee on Legislation and Public Relations was the message of President Harry Truman, submitting a national health program on November 19 and the latest version of the Wagner-Murray-Dingell bill submitted to the Senate and the House of Representatives the same day.

The President's program includes five features: The first is the proposal to grant federal aid for the building of hospitals and health centers throughout the nation. The Board of Trus-

tees of the American Medical Association has approved the principles of the Hill-Burton bill, and the committee recommends that the House of Delegates endorse this action of the Board as being within the program of constructive action toward improving the health of the American people.

The second recommendation of President Truman is for an extension of maternal and child health services. The Wagner-Murray-Dingell bill would make this effective by increased grants in aid through the Children's Bureau to the individual states. This constitutes an insidious attempt to turn over to the federal government functions that are definitely those of the medical profession. The American Medical Association has always favored proper aid for the extension of maternal and child health services where the need can be shown.

The third feature of the President's message dealt with the development of the National Research Foundation. The Committee on Postwar Medical Service, the Council on Medical Education and Hospitals and the Board of Trustees of the American Medical Association have approved the principles of the Magnuson bill, which would place the control of the National Research Foundation under a scientific board of directors rather than under an individual director to be appointed by the President. Your reference committee approves the action taken by those official bodies of the American Medical Association and urges that the House of Delegates support their recommendations.

Finally, the fourth proposal of President Truman and the main feature of the Wagner-Murray-Dingell bill is the creation of a federal system of compulsory sickness insurance. In commenting on this proposal, your reference committee recommends that the House of Delegates endorse the following statement from the editorial published in THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, Dec. 1, 1945: "No one will ever convince the physicians of the United States that the Wagner-Murray-Dingell bill is not socialized medicine. By this measure the medical profession and the sick whom they treat will be directly under political control. By this measure the great system of private hospitals and community hospitals that have grown up in our country will depend for their continued operation on funds paid to them by a federal government agency. By this measure the philanthropic efforts for the care of the sick, which have been the pride of our nation, will be forever deterred. Through this measure competent young men who would enter the medical profession will be forced to seek other fields of action still remaining under our democracy which still permit the exercise of individual initiative and freedom of thought and action. By this measure doctors in America would become clock watchers and slaves of a system. Now, if ever, those who believe in the American democracy must make their belief known to their representatives, so that the attempt to enslave medicine as first among the professions, industries and trades to be socialized will meet the ignominious defeat it deserves."

Your reference committee recommends that the House of Delegates express its official disapproval of section 4 of the Wagner-Murray-Dingell bill for the following reasons:

1. The Wagner-Murray-Dingell bill is founded on the false assumption that solution of the medical care problem for the American people is the panacea for all of the troubles of the needy.

2. This is the first step in a plan for general socialization not only of the medical profession but of all professions, industry, business and labor.

3. Positive proof exists from experience in other countries that inferior medical service results from compulsory health insurance.

4. A program such as outlined is enormously expensive. It will result in greatly increased taxes for the entire population of the United States.

5. Voluntary prepayment medical plans now in operation in many parts of the United States and which are rapidly increasing in number will accomplish all the objects of this bill with far less expense to the people and under these plans the public will receive the highest type of medical care.

On motion of Dr. Mather Pfeiffenberger, Illinois, seconded by Dr. E. V. Askey, California, and carried, the House rose from Executive Session, and on motion of Dr. R. W. Fouts, Nebraska, seconded and carried, the House went into regular session.

Wednesday Morning—Continued

Introduction and Address of Dr. Thomas C. Routley

Dr. Roger I. Lee, President, introduced Dr. Thomas C. Routley, Toronto, Canada, Secretary of the Canadian Medical Association, who addressed the House as follows:

Mr. President, Mr. Speaker, and Members of the House of Delegates: I deem it a rare privilege from year to year to be permitted to attend your sessions and meet you and say a word to you. I began my autumn tour of Canada in September and traveled some ten or twelve thousand miles, returning to my office two or three days ago. When I received Olin West's very kind note reminding me that you were meeting this week, I couldn't resist the temptation to come. As a matter of fact, I don't see how you fellows got along for the last two days without this perennial visitor from Canada.

I can see from the discussions this morning that you have problems just as we do. In fact, it reminds me of a story. One of our Canadian boys was sight-seeing in London and as he was raised in the vernacular of modern youth his language was punctuated with plenty of slang. He was standing in front of a building looking up at it when an Englishman came along, and he said to the Englishman "Say, bo, what is that?"

He said "That is our crematorium."

"Cripes," he said, "is that where they make cheese?"

"No, no, no," said the Englishman, "That isn't where they make cheese." He said "Why don't you go in and have a look around? It is quite an interesting building."

So the boy went in and in less time than it takes to tell it he landed out again on the sidewalk on all fours. The Englishman, who hadn't moved, said "Well, my boy, what happened to you?"

"Cripes," he said, "I don't know what happened to me. I went in there and I saw a lot of sourpusses over in the corner looking pretty gloomy, so I went over and I said 'Well, boes, what's cooking?'"

Well, listening to our discussions and reading your morning's paper, as I said, I realized there is plenty a-cooking and we in medicine, both over here and in Canada, have need to be on our guard. While on my feet, I would ask if I may be permitted to say one or two things.

In the first place, we have just decided this week to hold our seventy-seventh annual meeting in Banff Springs Hotel in the mountains. Many of us know that glorious spot. We are meeting during the week of June 10, and I here and now on behalf of the Canadian Medical Association extend a hearty welcome to any and all of you and your colleagues who can find it convenient to visit us in Banff during the week of June 10. It is on your way to San Francisco, a glorious stop, and we will try to be as kind to you as you have always been to me and my colleagues when we come here.

There is one other thing that I would like to say if I may. The world has emerged from this war, thank God, but I am not sure that the war is entirely over. The shooting is over but the peace is far from being fully realized and we are not going to have a peaceful world unless the United Nations undertakes to make the peace stick. And, gentlemen, we are not going to have united nations unless we have united understanding and good will and cooperation, and the reason we have such marvelous good will and cooperation and understanding between your country and mine is the fact that we see each other. We meet each other. We know each other, and we love each other.

Now is it possible that in the great company of nations something like that can be achieved? It can be achieved only by bringing the people of the United Nations together. Therefore, we in Canada a few days ago proposed to our government

that the government of Canada invite the United Nations to convene its first medical congress of the United Nations in our country.

I would like to suggest, if I may, Mr. Speaker, without presumption, that perhaps this great body would feel disposed to support an invitation to the steering committee of the United Nations now sitting in London, suggesting that a medical conference of all the United Nations be convened some time in the next year on this side of the water. If you felt you could support the idea of their being convened at some convenient center in Canada, we of course would be delighted on our side to have that support.

I have no knowledge whatever that the United Nations Council would consider favorably such an invitation, but I have a feeling that, should that invitation be supported by American medicine to the fullest extent of the term, by your body and ourselves, perhaps the invitation might be favorably received.

Mr. Speaker, may I once again express to you my profound sense of happiness and satisfaction in being received by you as I have been so cordially for now twenty-three years. I trust that the relationship which exists between our two bodies will be a signpost to medicine throughout the world so that we here in medicine on this continent may do our share to make the United Nations united and to insure that peace will be here to stay.

On motion of Dr. R. E. Schlueter, Missouri, seconded by Dr. George W. Kosmak, New York, and carried, the request of Dr. Routley for the support of the American Medical Association in inviting a medical conference of all united nations to be convened some time next year in Canada was referred to the Board of Trustees with power to act.

Report of Reference Committee on Miscellaneous Business

Dr. James R. Reuling Jr., Chairman, presented the following report, which on motion of Dr. Reuling, duly seconded and carried, was adopted section by section:

1. Resolution on National Physicians' Committee. Your reference committee approves the resolution and moves its adoption by the House.

2. Resolution on Removal of Sex Discrimination from Medical Students: Your reference committee is in sympathy with the intent of the resolution. However, recognizing that the admission requirements of the various medical schools are entirely a matter for the trustees and the admissions committees of the various medical schools, it is recommended that the Secretary of the American Medical Association be requested to refer this resolution to the Association of American Medical Colleges without comment.

Respectfully submitted,

James R. Reuling Jr., Chairman.
Stephen E. Gavin.
Henry A. Luce.
L. W. Larson.
William Bates.

Dr. Reuling moved that the Resolutions on Minimum Wage Standard, which had been tabled yesterday, be taken from the table, and the motion was seconded and lost.

Report of Reference Committee on Reports of Board of Trustees and Secretary

Dr. Thomas A. McGoldrick, Chairman, presented the following report, which on motions of Dr. McGoldrick, duly seconded and carried, was adopted section by section:

1. Resolution on Woman's Auxiliary: Your reference committee recommends that the House of Delegates approve this resolution.

2. Motion on Federal Control of Practice of Medicine: Your reference committee recommends that the House of Delegates approve this motion.

Proposed Amendment to the By-Laws, Chapter XII, Section 2

Dr. L. S. Goin, California, submitted the following proposed amendment to the By-Laws, chapter XII, section 2, which was referred to the Reference Committee on Amendments to the Constitution and By-Laws:

Resolved, That section 2 of chapter XII of the By-Laws be amended by striking the words "and subscribe to The Journal," and further amend section 2, chapter XII, by inserting after the words "is disapproved by the Judicial Council (line 8, p. 30) a new sentence to read "Fellows shall receive The Journal of the American Medical Association."

The House recessed for fifteen minutes, after which it was called to order by the Speaker, Dr. H. H. Shoulders.

Report of Reference Committee on Legislation and Public Relations

Report of Bureau of Legal Medicine and Legislation to Board of Trustees

1. Chemical Tests for Intoxication: The Board of Trustees approved in principle the draft, in form of an amendment of the Uniform Vehicle Code, a copy of which appears on page 69 of the Handbook. Your reference committee recommends similar approval by the House of Delegates.

2. Prescribing Narcotics by Telephone: Your reference committee concurs in the recommendation of the Board of Trustees that physicians restrict orders for narcotics by telephone to actual cases of emergency.

3. Industrial Health Under Jurisdiction of Labor Department (H. R. 525): A resolution covering this subject was introduced and referred to the Reference Committee on Industrial Health. Your reference committee presents no report.

4. Miller Bill to Establish a Federal Department of Health: A resolution also covering this subject was referred to another committee. Your reference committee presents no report.

5. Federal Licensure of Physicians: This matter is also covered in another resolution. Your reference committee presents no report.

6. The Wagner-Murray-Dingell Bill (S. 1050): This bill has been superseded by S. 1606, which is discussed in another part of the report of this reference committee.

7. Maternal and Child Welfare Act of 1945 (S. 1318): The detailed analysis of the provisions of this legislation was published in the Aug. 11, 1945 issue of The Journal. The bill would extend and greatly expand the E. M. I. C. program. It would make available to mothers and children medical care irrespective of financial needs. A "child" in contemplation of this legislation is any person under 21 years of age. Your reference committee recommends disapproval of the bill.

8. Committee to Study the Relationship of Medicine and the Law: Your reference committee approves the report of this committee.

9. Federal Programs to Promote Scientific Research: This matter is also considered in another resolution. Your reference committee presents no report.

10. Deferment of Premedical Students: A resolution covering this subject was referred to another committee. Your reference committee presents no report.

Report of Council on Medical Service and Public Relations

1. Section on Public Relations: Your reference committee desires to commend the splendid work that has been done during the past year. It desires to emphasize the importance of utilizing all dignified approachments to the public by which the public may have a clear knowledge of the work of organized medicine. Community health conferences have proved valuable in numerous sections of the country. The utilization of professional public relations counsels on a national, state and county level is approved.

2. Medical Care for the American People: Your reference committee has reviewed the article by Dr. Louis H. Bauer published in The Journal of the American Medical Association, Dec. 1, 1945. It commends the excellent manner in which the program of the physicians represented by the American Medical Association dealing with the extension of improved health and medical care to all the people is presented. It recommends that the article be generally read by the profession.

Your reference committee stresses especially section 1 of the program dealing with sustained production leading to better living conditions, improved housing, nutrition and sanitation which are fundamental to good health; section 4, dealing with the development in or extension of voluntary sickness insurance plans; section 7, dealing with federal aid to states where definite need is demonstrated, administered on a state basis with the help and advice of the medical profession; section 10, dealing with discharge of physicians from the armed forces as rapidly as is consistent with the war effort; section 12, dealing with adoption of federal legislation to provide for adjustments in draft regulations which will permit students to prepare for and continue the study of medicine, and section 12, dealing with postponement of consideration of revolutionary changes while such a large number of medical men are in the service and while such a large number of men and women are in uniform.

The Vice Speaker took the chair.

3. Published and Interim Reports of the Council: Your reference committee has carefully reviewed these reports. Much praise should be given this council for its earnestness and zeal in facing a most difficult assignment. It believes that the news letter and special bulletins issued have been of great value in arousing and maintaining interest in the various component societies. The studies already made in the field of voluntary insurance will be increasingly valuable.

The recommendation on service fellowships is heartily approved.

The establishment of the Washington office is a distinctly forward step, and its published report should be carefully read by every member of the profession.

The several regional conferences conducted by the Council as well as the many addresses delivered by individual members of the Council deserve great praise.

The Council is to be congratulated on the employment of Mr. Cooley and the highly competent advisory and consulting committees.

In its supplementary report the Council again calls attention to its studies on the status of medical students, with the recommendation that the House of Delegates request state and county medical societies to implement methods as early as possible for the admission of medical students to county societies in order that they may be inculcated with the ideals and ethics of medicine. This recommendation is approved.

The Council calls attention in the supplementary report to the fact that it has held numerous conferences with the American Cancer Society, in which meetings recommendations were made as to changes in certain of its rules and objectives. The Council recommends that the House of Delegates approve the following standards taken from these resolutions: (*a*) Definition: A cancer detection, cancer prevention, well person clinic is designed to detect abnormalities not producing symptoms sufficient to send the patient to the doctor. These clinics do not diagnose or treat diseases; (*b*) no such clinics shall be established in any community without the approval of the county medical society.

Your reference committee recommends approval of this recommendation.

Report of Council on Medical Service and Public Relations on Voluntary Prepayment Medical Care Plans, Resolution on Development of Specific National Health Program and Resolutions on Expansion of Medically Sponsored Voluntary Group Health Care Programs

Your reference committee has reviewed several resolutions calling for the adoption of voluntary prepayment medical care plans. All of these plans show a uniformity of desire for the immediate setting up of a national plan on a voluntary basis. In all of them the urgency of this being done is stressed. Accordingly your reference committee recommends that the House of Delegates of the American Medical Association instruct the Board of Trustees and the Council on Medical Service and Public Relations to proceed as promptly as possible with the development of a specific national health program, with emphasis on the nationwide organization of locally administered prepayment medical plans sponsored by medical societies.

The Speaker resumed the chair.

Resolutions on Change of System of Medical Care

Your reference committee has already gone on record as favoring the article by Dr. Louis H. Bauer in THE JOURNAL, December 1, page 945, and it recommends at this time that this resolution be approved.

Resolution on Permanent Conference on Medical Care

Your reference committee feels that it is unnecessary to take any action at this time and respectfully refers the resolution to the Board of Trustees and to the Council on Medical Service and Public Relations for consideration and attention.

Resolutions on Willingness to Cooperate in National Conference of Labor

Your reference committee is informed that this attempt has been previously made by both the Board of Trustees and the Council on Medical Service and Public Relations with little success. It accordingly returns this to them for any further action that they deem necessary.

H. R. 4717

Your reference committee believes that this resolution was prepared and presented before the House had the opportunity of hearing the brilliant address by Major General Hawley, and that, in view of the pronouncements made by Major General Hawley, no action at this time is necessary.

Report of Council on Medical Service and Public Relations on Legislation

Your reference committee is heartily in accord with the sentiment expressed in this report.

Midwinter Session of House of Delegates

Dr. Hamilton asked if any report had been submitted regarding the suggestion of the President for midwinter meetings of the House in addition to the annual session and was advised that no such report had as yet been submitted.

Dr. Hamilton then reported that the Board of Trustees suggested that, if two meetings of the House should be held each year, that would undoubtedly obviate the necessity for any action regarding the delegating of powers of the House of Delegates to the Board of Trustees.

Your reference committee approves this in principle and recommends that the proper By-Law for two meetings a year of the House of Delegates be prepared for introduction and consideration by the House of Delegates at its next meeting, July 1946.

Resolutions on Licensure of Honorably Discharged Medical Officers Without Examination and Resolution on Opposition to H. R. 2969

Your reference committee is strongly of the opinion that licensing of physicians is a state right and as such it does not come within the province of the House of Delegates of the American Medical Association to make any such recommendations to the state legislature. Your reference committee recommends disapproval of the Resolutions on Licensure of Honorably Discharged Medical Officers Without Examination and approval of the Resolution on Opposition to H. R. 2969.

Respectfully submitted,

E. S. HAMILTON, Chairman.
JOHN J. MASTERSON.
EDWARD L. BORTZ.
RAYMOND L. ZECH.
LLOYD NOLAND.

Dr. Hamilton moved adoption of each section of the report of the reference committee dealing with the Report of the Board of Trustees on the Bureau of Legal Medicine and Legislation, and each motion was duly seconded and carried after discussion.

On motions of Dr. Hamilton, seconded and carried after discussion, the report of the reference committee referring to the Report of the Council on Medical Service and Public Relations was adopted section by section.

It was moved by Dr. Hamilton that the report of the reference committee concerning resolutions dealing with voluntary prepayment medical care plans be adopted. The motion was seconded by several and carried.

On motion of Dr. Hamilton, seconded by Dr. Arthur J. Bedell, Section on Ophthalmology, and carried, the report of the reference committee, referring to Resolutions on Change of System of Medical Care was adopted.

Dr. Hamilton moved that the section of the report of the reference committee concerning the Resolution on Permanent Conference on Medical Care be adopted. The motion was seconded by Dr. Burt R. Shurly, Section on Laryngology, Otology and Rhinology, and carried.

It was moved by Dr. Hamilton, seconded by Dr. Charles H. Phifer, Illinois, and carried that the portion of the report of the reference committee dealing with Resolutions on Willingness to Cooperate in National Conference of Labor be adopted.

Dr. Hamilton moved, and the motion was seconded and carried, that the section of the report of the reference committee with respect to H. R. 4717 be adopted.

On motion of Dr. Hamilton, seconded and carried, the part of the report of the reference committee pertaining to the report of the Council on Medical Service and Public Relations on Legislation was adopted.

Dr. Hamilton moved that the report of the reference committee on Midwinter Session of House of Delegates be adopted. The motion was seconded and carried.

The Speaker declared it unnecessary to amend the By-Laws as suggested by Dr. Hamilton to provide for two sessions of the House of Delegates because interim sessions can now be called by the Speaker on written request of twenty-five or more of the delegates representing one third or more of the constituent associations or on request of a majority of the Board of Trustees.

Dr. Hamilton moved, and the motion was seconded by Dr. Charles H. Phifer, Illinois, and carried after discussion, that the report of the reference committee dealing with resolutions on licensure of honorably discharged medical officers and the resolution on opposition to H. R. 2969 be approved.

Report of the Reference Committee on Rules and Order of Business

Dr. Francis F. Borzell, Chairman, presented the following report:

In view of the fact that the business of the House is not yet completed, and also in view of the fact that this House moved yesterday to have the election at 2 o'clock this afternoon, I move that the business of the morning be suspended temporarily; that we reconvene at 2 o'clock; that at the conclusion of the election this afternoon we consider again the order of business of this morning that has not yet been completed, and that then, if necessary, the House continue on into the evening. I have been told that this room will be available so that we may then complete our business today.

That means that this afternoon's session would constitute the last session of the House of Delegates, and your attention is called by the Reference Committee on Rules and Order of Business to a provision in the By-Laws which provides that new business to be presented at the last session requires unanimous consent for introduction and all such business so presented requires three-fourths affirmative vote for adoption. The business of the House, therefore, would be expedited in the last session.

Dr. Mather Pfeiffenberger, Illinois, moved that the House recess for luncheon.

. . . The motion was seconded, was put to a vote, and was carried, and the meeting recessed at 1 o'clock.

Wednesday Afternoon, December 5

The House of Delegates was called to order at 2:10 p. m. by the Speaker, Dr. H. H. Shoulders.

Report of Reference Committee on Credentials

Dr. G. Henry Mundt, Chairman, announced that 170 delegates had registered for this session of the House.

Roll Call

Dr. Olin West, Secretary, called the roll.

Presentation of Minutes

On motion of Dr. William R. Brooksher, Arkansas, seconded and carried, the House dispensed with the reading of the minutes.

Resignation of the Speaker, Dr. H. H. Shoulders

Dr. H. H. Shoulders, Speaker, offered his resignation as Speaker of the House of Delegates. It was moved by Dr. James R. Reuling Jr., New York, seconded by Dr. George W. Kosmak, New York, and carried after amendment, that the resignation be accepted with regret and with due appreciation of services to this House.

ELECTION OF OFFICERS

The Speaker declared the next order of business to be the election of officers.

Election of President-Elect

The Vice Speaker assumed the Chair and called for nominations for President-Elect.

Dr. A. R. McComas, Missouri, nominated Dr. Alphonse McMahon, St. Louis, and the nomination was seconded by Drs. Robert E. Schlueter, Missouri; Clark Bailey, Kentucky, and Thomas A. McGoldrick, New York.

Dr. H. B. Everett, Tennessee, nominated Dr. H. H. Shoulders, Nashville, Tenn., and the nomination was seconded by Drs. Stephen E. Gavin, Wisconsin; Louis A. Buie, section on Gastro-Enterology and Proctology; Olin H. Weaver, Georgia; Francis F. Borzell, Pennsylvania; Robert H. Hayes, Illinois; Floyd S. Winslow, New York, and Thomas A. Foster, Maine; the delegation from New Jersey, and Drs. Emily D. Barringer, New York; William R. Brooksher, Arkansas; James Q. Graves, Louisiana, and Lloyd Noland, Alabama.

Dr. Barney J. Hein, Ohio, nominated Dr. E. J. McCormick, Toledo, Ohio, and the nomination was seconded by the delegation from Connecticut.

Dr. Arthur J. Bedell, Section on Ophthalmology, moved that the nominations be closed, and the motion was seconded by Dr. E. G. Wood, Tennessee, and carried.

Dr. Olin West, Secretary, announced that 150 delegates had answered the roll call. Three additional delegates reported in attendance.

The Tellers spread the ballot and the Secretary announced that 153 delegates had reported present and 149 votes had been cast, of which Dr. McMahon had received 21, Dr. Shoulders 77 and Dr. McCormick 51.

The Vice Speaker declared Dr. H. H. Shoulders, Nashville, Tenn., having received the majority of the votes cast, elected President-Elect.

Dr. A. R. McComas, Missouri, moved that Dr. Shoulders be declared elected unanimously, and the motion was seconded and carried.

The Vice Speaker appointed Dr. James R. Reuling Jr., New York, and Dr. H. B. Everett, Tennessee, to escort the newly elected President-Elect, Dr. H. H. Shoulders, to the platform.

Election of Vice President

Dr. Charles H. Phifer, Illinois, nominated for Vice President Dr. E. S. Hamilton, Kankakee, Ill., and the motion was seconded by Dr. Thomas F. Thornton, Iowa. Dr. A. A. Walker, Alabama, stated that since Dr. Hamilton was a member of the House of Delegates he was not eligible for election as Vice President according to the By-Laws, and the Vice Speaker read that section of the By-Laws, after which Dr. Phifer withdrew his nomination of Dr. Hamilton.

Address of President-Elect

Dr. H. H. Shoulders, President-Elect, was escorted to the platform and addressed the House as follows:

Some years ago I served with you as a member of this House of Delegates. Then I developed a respect for the members

of this House, as well as a profound regard for the heavy duties you performed. You later elevated me to Speaker in the House, and my respect for you and your responsibility has grown with the years.

Today I do not know how to express to you my profound sense of gratitude for the honor you have conferred on me, but I will say this: So help me God, I will endeavor to fulfil the office so as not to embarrass you.

I thank you.

Election of Vice President

Dr. A. A. Walker, Alabama, nominated Dr. W. R. Molony, Los Angeles, and the nomination was supported by several. Dr. Mather Pfeiffenberger, Illinois, moved that the nominations be closed and that the ballot be cast for Dr. Molony. The The motion was seconded by several and carried.

Dr. Olin West, Secretary, cast the vote of the House for Dr. W. R. Molony, Los Angeles, for Vice President for the ensuing year, and the Vice Speaker declared Dr. Molony so elected.

Election of Secretary

Dr. A. A. Walker, Alabama, nominated Dr. Olin West as Secretary to succeed himself, and the motion was seconded by several. Dr. James R. Reuling Jr., New York, moved that the nominations be closed and a rising vote be taken, and the motion was seconded by several and carried.

The rising vote was unanimous and the Vice Speaker declared Dr. Olin West elected Secretary of the American Medical Association for the ensuing year to succeed himself.

It was moved by Dr. Stanley H. Osborn, Section on Preventive and Industrial Medicine and Public Health, that the vote be by one ballot to conform to the legal requirements, and the motion was seconded and carried.

Dr. R. W. Fouts, Vice Speaker, took great pleasure in casting the ballot of the House for Dr. Olin West as Secretary of the American Medical Association for the ensuing year and declared Dr. West so elected.

Election of Treasurer

Dr. James R. Bloss, Chairman, Board of Trustees, reported as follows: The Board would like to submit the name of Dr. Josiah J. Moore, Chicago, to succeed himself as Treasurer of the Association.

On motion of Dr. Arthur J. Bedell, Section on Ophthalmology, seconded and carried, the nomination of Dr. Moore was supported.

Dr. Olin West, Secretary, cast the vote of the House for Dr. Josiah J. Moore as Treasurer of the American Medical Association for the ensuing year and the Vice Speaker declared Dr. Moore so elected.

Election of Speaker of House of Delegates

The Vice Speaker requested the President, Dr. Roger I. Lee, to take the chair.

Dr. Karl S. J. Hohlen, Nebraska, nominated Dr. R. W. Fouts, Omaha, as Speaker of the House of Delegates, and the nomination was seconded by several, after which it was moved, seconded and carried that the nominations be closed.

On motion of Dr. Mather Pfeiffenberger, Illinois, seconded and carried, Dr. Olin West, Secretary, cast the vote of the House for Dr. R. W. Fouts, Omaha, as Speaker of the House of Delegates of the American Medical Association for the ensuing year, and the Acting Speaker, Dr. Roger I. Lee, declared Dr. Fouts so elected.

Dr. R. W. Fouts, Speaker, resumed the chair.

Election of Vice Speaker of House of Delegates

Dr. Walter F. Donaldson, Pennsylvania, nominated Dr. Francis F. Borzell, Philadelphia, as Vice Speaker of the House of Delegates, and the nomination was supported by several.

It was moved by Dr. Arthur J. Bedell, Section on Ophthalmology, that the nominations be closed. The motion was seeconded and carried after the nomination of Dr. James R. Reuling Jr., Bayside, N. Y., by Dr. Floyd S. Winslow, New York.

Dr. Reuling requested the privilege of withdrawing his name from nomination and moved that one unanimous vote be cast for Dr. Borzell. The motion was seconded and carried.

Dr. R. W. Fouts, Speaker, cast the ballot of the House for Dr. Francis F. Borzell, Philadelphia, as Vice Speaker of the House of Delegates of the American Medical Association for the ensuing year and declared Dr. Borzell so elected.

Election of Trustees

Election of Trustee to Succeed Dr. Ralph A. Fenton

Dr. James M. Flynn, New York, nominated Dr. John H. Fitzgibbon, Portland, Ore., as Trustee to succeed Dr. Ralph A. Fenton, Portland, Ore., whose term as Trustee expires this year and who is not eligible for reelection. The nomination was supported by several.

On motion of Dr. A. A. Walker, Alabama, seconded and carried, the nominations were closed and the Secretary was instructed to cast the vote of the House for Dr. Fitzgibbon.

Dr. Olin West, Secretary, cast the ballot of the House for Dr. John H. Fitzgibbon, Portland, Ore., to serve as Trustee of the American Medical Association for a term of five years, and the Speaker declared Dr. Fitzgibbon so elected.

Election of Trustee to Succeed Dr. James R. Bloss

Dr. J. Morrison Hutcheson, Virginia, nominated Dr. Walter B. Martin, Norfolk, Va., as Trustee to succeed Dr. James R. Bloss, Huntington, W. Va., whose term expires this year and who is not eligible for reelection.

Dr. Walter G. Phippen, Massachusetts, nominated Dr. James A. Miller, Hartford, Conn., and the nominations of Dr. Martin and Dr. Miller were seconded by several.

Dr. Mather Pfeiffenberger, Illinois, moved that the nominations be closed, and the motion was seconded and carried.

The tellers spread the ballot and Dr. Olin West, Secretary, announced that 146 votes had been cast, of which Dr. Martin received 47 and Dr. Miller 99, and the Speaker declared Dr. James R. Miller, having received the majority of the votes cast, elected Trustee to succeed Dr. James R. Bloss for a term of five years.

Election of Trustee to Complete the Unexpired Term of Dr. Edward M. Pallette, Deceased

Dr. Louis A. Buie, Section on Gastro-Enterology and Proctology, nominated Dr. Robert A. Peers, Colfax, Calif., to succeed himself serving in place of Dr. Edward M. Pallette, deceased.

Dr. L. S. Goin, California, nominated Dr. Dwight H. Murray, Napa, Calif., and the nomination was seconded by several.

Dr. E. H. Cary, Texas, nominated Dr. Stanley J. Seeger, Texarkana, Texas, and the nomination was seconded by Dr. James C. Sargent, Wisconsin.

It was moved, seconded and carried that the nominations be closed and the Tellers spread the ballot.

Dr. Olin West, Secretary, announced that 142 votes had been cast, of which Dr. Peers received 34, Dr. Murray 70 and Dr. Seeger 38. The Speaker declared that the name of Dr. Peers, having received the least votes, would be removed from the ballot, and the Tellers spread a second ballot.

Dr. Olin West, Secretary, stated that 126 votes were cast, of which 95 were for Dr. Murray and 41 for Dr. Seeger, and the Speaker declared Dr. Dwight H. Murray, Napa, Calif., elected Trustee to fill the unexpired term ending in 1947 of Dr. Edward M. Pallette, deceased.

On motion of Dr. Cary, seconded and carried, the election of Dr. Murray was made unanimous.

Nominations for Standing Committees

Nominations by President Roger I. Lee

Dr. Roger I. Lee, President, presented the following nominations:

1. Member of Judicial Council: Dr. Louis A. Buie, Rochester, Minn., to succeed Dr. George Edward Follansbee, deceased.

2. Member of Council on Scientific Assembly: Dr. Henry R. Viets, Boston, to succeed Dr. A. A. Walker, Birmingham, Ala.

The nomination of Dr. Buie was confirmed on motion of Dr. Walter E. Vest, West Virginia, duly seconded and carried.

On motion of Dr. A. A. Walker, Alabama, seconded and carried, the nomination of Dr. Viets was approved.

NOMINATIONS BY BOARD OF TRUSTEES

Dr. James R. Bloss, Chairman of the Board of Trustees, presented the following report:

Council on Medical Education and Hospitals: In accordance with the usual custom of submitting more than one name to the House of Delegates for each vacancy on the Council on Medical Education and Hospitals, the Board submits the following nominations for the vacancy created by the expiration of the term of Dr. Weiskotten:

Dr. H. G. Weiskotten, Syracuse, N. Y.

Dr. Wilburt C. Davison, Durham, N. C.

The Tellers spread the ballot, and the Secretary announced that 121 votes had been cast, of which Dr. Weiskotten received 75 and Dr. Davison 46.

The Speaker declared Dr. Herman G. Weiskotten, Syracuse, N. Y., elected to succeed himself as a member of the Council on Medical Education and Hospitals for a term ending in 1952.

Council on Medical Service and Public Relations: The Board wishes to submit the following nominations for the two vacancies on the Council on Medical Service and Public Relations:

For the vacancy caused by the expiration of the term of Dr. Adson: Dr. A. W. Adson, Rochester, Minn.; Dr. Edwin S. Hamilton, Kankakee, Ill., and Dr. Thomas F. Thornton, Waterloo, Iowa.

For the vacancy caused by the resignation of Dr. Leathers: Dr. William R. Brooksher, Fort Smith, Ark., who was elected by the Board to serve until this meeting of the House; Dr. Wingate Johnson, Winston-Salem, N. C., and Dr. Walter B. Martin, Norfolk, Va.

Dr. Bloss stated that he was authorized to present the resignation of Dr. John H. Fitzgibbon, Portland, Ore., who had been elected a Trustee. On motion, seconded and carried, the resignation was accepted.

Dr. Bloss then submitted the following nominations for a member of the Council on Medical Service and Public Relations to succeed Dr. Fitzgibbon: Dr. James P. Kerby, Salt Lake City; Dr. E. N. Roberts, Pocatello, Idaho, and Dr. Raymond L. Zech, Seattle.

Dr. E. S. Hamilton and Dr. Thomas F. Thornton withdrew their names, since they wished Dr. Adson to be retained as a member of the Council on Medical Service and Public Relations.

On motion, seconded and carried, Dr. A. W. Adson, Rochester, Minn., was elected for a term of three years to succeed himself, and the Speaker declared Dr. Adson so elected.

The Tellers spread the ballot for the election of a member of the Council on Medical Service and Public Relations to succeed Dr. W. S. Leathers, resigned. The Secretary announced that 103 votes had been case, of which Dr. Brooksher received 46, Dr. Johnson 19 and Dr. Martin 38.

A second ballot was spread by the Tellers, with the omission of the name of Dr. Johnson, who had received the lowest number of votes cast, and the Secretary announced that 103 votes had been cast, of which Dr. Brooksher received 47 and Dr. Martin 56, and the Speaker declared Dr. Walter B. Martin, Norfolk, Va., elected a member of the Council on Medical Service and Public Relations for a term of three years to succeed Dr. Leathers.

The Tellers spread the ballot for the election of a member of the Council on Medical Service and Public Relations to succeed Dr. John H. Fitzgibbon, resigned.

The Secretary announced that 102 votes had been cast, of which Dr. Kerby received 23, Dr. Roberts 18 and Dr. Zech 61.

The Speaker declared Dr. Raymond L. Zech, Seattle, having received a majority of the votes cast, elected a member of the Council on Medical Service and Public Relations to succeed Dr. John H. Fitzgibbon, resigned, for a term ending in 1947.

Election of Affiliate and Associate Fellows

NOMINATIONS FOR AFFILIATE FELLOWSHIP APPROVED BY THE COUNCIL ON SCIENTIFIC ASSEMBLY

Dr. Olin West, Secretary, presented nominations for Affiliate Fellowship as follows, which were confirmed on motion of Dr. E. S. Hamilton, Illinois, seconded and carried:

Allen, William G., Evanston, Ill.
Armstrong, John H., Kirkwood, Mo.
Ayres, George T. (nomination from Minnesota), Phoenix, Ariz.
Bacon, L. C., Sr., St. Paul.
Beatty, J. David, Los Angeles
Becker, W. H., St. Louis.
Bliss, Guy L., Long Beach, Calif.
Bogart, Arthur H., Brooklyn.
Bonner, Adolph, Brooklyn.
Bullitt, James B., San Jose, Calif.
Carpenter, H. L., Richmond, Calif.
Carson, George R., San Francisco.
Clark, J. Bayard, New York.
Denny, R. B., Creve Coeur, Mo.
Drummond, Winslow, Philadelphia.
Dudley, Carl E., St. Louis.
Dunkley, J. H., Roanoke, Va.
Fabricius, J. R. (nomination from New York), Pittsburgh
Goddard, Walter W. (nomination from New York), Miami, Fla.
Grad, Herman, Star Lake, N. Y.
Graham, H. B., San Francisco.
Hoenes, A. J., Salt Lake City.
Holland, C. L., Fairmount, W. Va.
Hooker, Ransom S. (nomination from New York), Charleston, S. C.
Kellogg, Ernest C. (nomination from California), Cove., Ore.
Kleinman, Morris, New York.
Koch, Otto W., St. Louis.
Leverich, Leslie (nomination from Kansas), Dallas, Texas.
Livermore, W. H., Chickasha, Okla.
MacLennan, Angus D., Boston.
McBratney, E. W., St. Louis.
Otis, Newton M. (nomination from California), El Paso, Ill.
Parowski, S. W., Chicago.
Peet, Edward W., New York.
Roberts, William H., LaJolla, Calif.
Rudderow, Edward D., New York.
Sewall, Edward C., Stanford University, Calif.
Shaw, Perry H., Binghamton, N. Y.
Slemons, J. Morris, Los Angeles.
Trach, John M., Fairmont, W. Va.
Tupper, Virgil L., Bay City, Mich.
Vander Veer, E. A., Albany, N. Y.
Vischer, L. G., Los Angeles.
Wiggers, A. F. A., Flushing, L. I.
Wilcox, Homer B., Kingston, Pa.
Williamson, N. E., Los Altos, Calif.

NOMINATIONS FOR ASSOCIATE FELLOWSHIP

Dr. Qlin West, Secretary, presented the following nominations for Associate Fellowship approved by the Judicial Council or by the executive committees of the Sections indicated, which were confirmed on motions, seconded and carried:

JUDICIAL COUNCIL

Kaufman, Lillie S., Dhamtari, Central Province, India.
Myer, Everett B., Castener, P. R.

SECTION ON EXPERIMENTAL MEDICINE AND THERAPEUTICS

Stefan Ansbacher, Richmond Hill, N. Y.
Herbert Silvette, Charlottesville, Va.
van Dyke, Harry B., New York.

SECTION ON PREVENTIVE AND INDUSTRIAL MEDICINE AND PUBLIC HEALTH

Seiberlich, Joseph, Durham, N. H.

Place of 1948 Annual Session

Dr. James R. Bloss, Chairman of the Board of Trustees, reported that an invitation to the Association, dated April 1945 to meet in St. Louis in 1948 has been received from the county and state medical societies as well as from the convention and publicity bureau. This is the only invitation received for 1948 as yet, at least it is the only one that has come to the attention of the Board.

Dr. Robert E. Schlueter, Missouri, extended an invitation from the Missouri State Medical Association and the St. Louis Medical Society and from the people of the city of St. Louis to convene in that city in the year 1948.

It was moved by Dr. George W. Kosmak, New York, seconded and carried, that the invitation to meet in St. Louis in 1948 be accepted with thanks.

Appointment of Members of Committee on Centennial Celebration

The Speaker announced the appointment of Members of the Committee on Centennial Celebration to Cooperate with the Board of Trustees, as follows: Dr. E. R. Cunniffe, New York, Chairman; Dr. Walter F. Donaldson, Pittsburgh; Dr. Thomas P. Murdock, Meriden, Conn.; Dr. Thomas S. Cullen, Baltimore, and Dr. Warren F. Draper, of the U. S. Public Health Service.

Appointment of Members of Committee on Distinguished Service Award

The Speaker announced the appointment of the following members of the Committee on Distinguished Service Award to

succeed the two members whose terms expire at the present time: Dr. A. A. Walker, Birmingham, Ala., Chairman, and Dr. George H. Curfman, Denver.

Report of Reference Committee on Legislation and Public Relations

Dr. E. S. Hamilton, Chairman, presented the following report, which is presented as amended:

1. Resolution on Survey of Medical Societies in Metropolitan Centers re Qualifications of Their Physicians: Your reference committee is of the opinion that this is a purely local problem and should be handled by the local medical society.

2. Report of Committee on Rural Medical Service: The report of the Committee on Rural Medical Service, which was referred to your reference committee, was carefully reviewed. Your reference committee commends the Committee on Rural Medical Service for its work and recommends that members of that committee amplify and continue their work with the appointment of necessary state committees.

3. Supplementary Report of the Council on Medical Service and Public Relations Dealing with the Extension of the Emergency Maternal and Infant Care Program, Postwar: Your reference committee is strongly in favor of the passage of this resolution. It has already gone on record as being opposed to the Pepper bill, which is the basis of this report. It recommends the approval of this resolution.

4. Supplementary Report of Council on Medical Service and Public Relations Dealing with Resolutions on Modern Medical Public Relations: Your reference committee recommends the adoption of this report:

5. Supplementary Report of Council on Medical Service and Public Relations on Resolutions on Formation of a National Health Congress: Your reference committee recommends the adoption of these resolutions.

6. Supplementary Report of Council on Medical Service and Public Relations with Respect to Health Legislation Beneficial to the People: In view of the importance and magnitude of the report, your reference committee recommends that it be referred to the Board of Trustees and to the Council on Medical Service and Public Relations for study and report at the next meeting of the House of Delegates.

7. Supplementary Report of Board of Trustees Referring to Animal Experimentation: Your reference committee recommends the adoption of this report and further recommends that the Board of Trustees be instructed to prepare for widespread dissemination an illustrated booklet outlining the benefits to animals and mankind of animal experimentation. An effort should be made to cooperate with the national movement on this subject when it has introduced its plans in order to avoid duplication.

Respectfully submitted,

E. S. HAMILTON, Chairman.
JOHN J. MASTERSON.
EDWARD L. BORTZ.
RAYMOND L. ZECH.
LLOYD NOLAND.

On motion of Dr. Hamilton, duly seconded and carried, after discussion, the first six sections of the report of the reference committee were adopted.

The seventh section of the report as amended was adopted on motion of Dr. Hamilton, seconded and carried.

On motion of Dr. Hamilton, seconded by several and carried, the report of the reference committee as amended was adopted as a whole.

Report of Reference Committee on Amendments to the Constitution and By-Laws

Dr. Carl R. Steinke, Chairman, presented the following report:

1. Report of Council on Medical Service and Public Relations Dealing with Membership and Fellowship: The Council recommends that the necessary changes in the By-Laws be prepared for submission to the House of Delegates to provide that any Fellow entering the armed forces retain his Fellowship and that all those who have been dropped as Fellows be reinstated and kept on the list of Fellows until the end of the war or six months after the termination of their military service. Such Fellows, of course, would not be entitled to receive any of the journals unless they subscribed, but their status as Fellows would be protected.

The recommendation to remit Fellowship dues so that Fellowship would be protected in the medical forces was introduced in the House of Delegates at the 1943 session. At that time the matter was disapproved by the reference committee and its decision supported by the House of Delegates. The reason for this action was that the dues of Fellowship were so small that any one wishing to remain a Fellow could easily afford to pay that amount. As a great majority, if not all, of the component societies remit the dues of their members in service, practically all men remain members of the American Medical Association.

If any member loses his Fellowship because of failure to retain his affiliation with his county society, he cannot be carried as a Fellow. The first requirement in the qualifications necessary for Fellowship is that he be a member of the American Medical Association in good standing.

Fellows of the Association who stayed with the armed forces during World War II, whose Fellowship was permitted to lapse during their time of military service, may be restored to Fellowship on payment of Fellowship dues for the year during which their restoration to Fellowship is effected.

2. Supplementary Report of Council on Scientific Assembly Recommending Changes in Chapter XV of the By-Laws Dealing with the Scientific Sections: Your reference committee recommends approval of the following changes in the By-Laws:

Change the word "thirty-five" in the fourth line of section 10, chapter XV, to the word "sixty," so that the first four lines of section 10, chapter XV, will read:

"Sec. 10. TIME AT WHICH TITLES MUST BE IN.—Titles of papers to be presented to the section must be in the hands of the secretary of the section at least sixty days before the first day of the"

Change section 15 of chapter XV of the By-Laws to be section 16 and insert as new section 15 the following:

"Sec. 15. PRESENTATION OF RESOLUTIONS.—No resolution shall be presented before any section later than the regular Executive Session on the second day of the section meeting at which time the officers are elected.

Respectfully submitted,

CARL R. STEINKE, Chairman.
K. S. J. HOHLEN.
GEORGE P. JOHNSTON.
ROSS S. MCELWEE.
THOMAS A. FOSTER.

3. Resolution Suggesting Amendment to By-Laws, Chapter XII, Section 2: Your reference committee is informed that this must lie over until next year, since it was not introduced until today.

On motion of Dr. Steinke, seconded and carried, the first two sections of the report of the reference committee were adopted, and on motion, seconded and carried, the By-Laws were amended as suggested in the second section of the report of the reference committee just approved.

The Speaker announced that the amendment referred to in the third section of the report of the reference committee could not be acted on this year.

On motion of Dr. Steinke, seconded and carried, the report of the reference committee was adopted as a whole.

Unfinished Business

Annual Session in San Francisco in 1946: Dr. John W. Cline, California, extended a cordial invitation to attend the San Francisco session in 1946.

Proposed Amendment to Constitution: Dr. Henry A. Luce, Michigan, with unanimous consent of the House, presented the following amendment to the Constitution, which must lie over for action until next year: Amend section 3, article 5, of the Constitution by substituting the figure "176" for the figure "175" in the second line of this section, so that the first sentence of section 3, article 5, will read: "The total voting membership of the House of Delegates shall not exceed 176."

On motion, seconded and carried, the House adjourned at 5:30 p. m. to meet in San Francisco July 1, 1946.

Washington Letter

(From a Special Correspondent)

Dec. 17, 1945.

Construction of Twenty-Nine Additional Veterans' Hospitals Approved

Construction of twenty-nine new Veterans Administration hospitals and one veterans' home and transfer to the agency of seven surplus army hospitals has been authorized by President Truman. Five of the army hospitals will be for temporary use. The program announced by the President will give the agency 13,422 more beds, in addition to the 15,726 beds authorized under construction sanctioned last October. Coincidentally General Omar Bradley, veterans administrator, announced that Winter General Hospital at Topeka, Kan., acquired by the Army, will become a center for neuropsychiatric training under Dr. Karl A. Menninger, psychiatrist and brother of Brig. Gen. William C. Menninger, chief of the Army psychiatric division. The new veterans' hospitals will be built near major medical centers: Columbia University College of Physicians and Surgeons, University of Alabama School of Medicine, University of Arkansas School of Medicine, University of Michigan Medical School, Washington University School of Medicine outside St. Louis, Cornell University Medical College, Syracuse University College of Medicine, Duke University School of Medicine, University of Pennsylvania School of Medicine, Temple University School of Medicine, Jefferson Medical College of Philadelphia and the medical center at Charlotte, N. C. Major Gen. Paul Hawley, medical director, states that the agency will lean heavily on established medical schools and the urban medical centers of the nation.

87,001 Illegitimate Births Reported in Nation

Census Bureau reports that there were 87,001 illegitimate births in 1944, a gain of 4,415 over 1943, in thirty-eight states and the District of Columbia. When allowance is made for those not reported, it was estimated that there would be 100,000 illegitimate births. The 87,001 does not record illegitimate births in California, Colorado, Connecticut, Maryland, Massachusetts, Nebraska, New Hampshire, New Mexico, New York and Wyoming, which do not require statements on legitimacy for birth registration. Of the total recorded, 36,252 were white and 50,749 nonwhite.

Wide Acclaim for Voluntary Prepaid Medical Plan

The American Medical Association plan to establish a national system of voluntary prepaid medical care was widely publicized by the Washington press and evoked favorable comment. Coincident with the announcement from the House of Delegates of the Association, sponsors of the Truman health plan bought advertising space in daily papers to advocate its passage and to reiterate Mr. Truman's claim that it was not socialized medicine.

House Approves Another Billion and Half for UNRRA

The House has approved a bill authorizing a second government contribution to the United Nations Relief and Rehabilitation Administration of $1,350,000,000. The bill has been sent to the Senate. It carries a rider calling on President Truman to try "through appropriate channels to facilitate" the entry of American newspapermen into countries receiving UNRRA assistance.

Capital Notes

Finest recognition of psychologists is that military establishments are setting up permanent sections, John G. Jenkins, Navy Aviation Psychology Chief, told the American Psychological Association. Millard W. Rice, national service director, disabled American veterans, told the National Council of the Physically Handicapped, "The handicapped will be the first fired and the last hired."

During hearings on the proposal to license practical nurses in the District of Columbia it was suggested that the District Nurses Examining Board be stripped of control over the nursing profession. Childrens Hospital doctors have started a "research foundation" to compile all discoveries made in the hospital wards, marking the hospital's seventy-fifth anniversary.

Lieut. Col. S. Ross Taggart, soon to be discharged from the Army Medical Corps, has been named director of the District of Columbia Bureau of Venereal Diseases.

Medical Legislation

MEDICAL BILLS IN CONGRESS

Veterans Administration

The bill to establish a Department of Medicine and Surgery in the Veterans Administration, H. R. 4717, has passed the House of Representatives. As passed, the bill contains the provision under which the utilization of osteopathic services in veterans' hospitals will be authorized. In the Senate, the bill has been referred to the Senate Committee on Finance.

The construction of veterans' hospitals in or near the city of Ukiah, Mendocino County, Calif., and at Paradise, Butte County, Calif., will be authorized respectively by H. R. 4738 and H. R. 4741, both introduced by Representative Lea, California.

A bill introduced by Representative Peterson, Florida, H. R. 4847, proposes domiciliary and hospital care for veterans with non-service connected injuries or diseases who have reached the age of 65 years.

Senator Langer, North Dakota, proposes by S. 1633 that the Secretary of War be directed to provide facilities and personnel for the hospitalization and treatment of members of the armed forces suffering from transverse myelitis or related disabilities "at one hospital located in an area in which climatic conditions are favorable for treatment of such cases, and to transfer to such hospital all such persons undergoing or in need of hospitalization and treatment."

A Senate bill, S. 1626, introduced by Senator McFarland, Arizona, proposes that, in the administration of laws providing for the hospitalization and treatment of former members of the armed forces and laws providing for the payment of pensions to former members of the armed forces or their dependents, any person who is disabled as a result of injuries incurred, or disease contracted, subsequent to Sept. 15, 1940 in the performance of his duties as a member of the American field service shall be deemed to have incurred such injuries or contracted such disease in line of duty while serving on active duty in the armed forces.

Representative Hedrick, West Virginia, by H. R. 4679, proposes to provide compensation for veterans of World War II who have had tuberculosis.

Barbiturates

By H. Res. 440, submitted by Representative Rogers, Massachusetts, the Secretary of the Treasury will be requested to furnish the House of Representatives (1) such facts as may be in his possession regarding the use by the public of barbiturates and (2) the facts with respect to the best method or methods of protecting the consuming public from the improper use of barbiturates resulting from the indiscriminate distribution and sale of such drugs.

Navy Medical Corps

S. Res. 200, submitted by Senator Reed, Kansas, would request the Secretary of the Navy to appoint a board of inquiry to ascertain why the demobilization of medical and dental officers has not been expedited.

The Hill-Burton Hospital Construction Bill

S. 191, the Hill-Burton hospital construction bill, has passed the Senate in substantially the same form in which it was reported by the Senate Committee on Education and Labor.

Medical News

(PHYSICIANS WILL CONFER A FAVOR BY SENDING FOR THIS DEPARTMENT ITEMS OF NEWS OF MORE OR LESS GENERAL INTEREST: SUCH AS RELATE TO SOCIETY ACTIVITIES, NEW HOSPITALS, EDUCATION AND PUBLIC HEALTH.)

CALIFORNIA

Surgical Meeting.—Honorary membership in the Los Angeles Surgical Society was presented to Dr. Frederick A. Coller, professor and head of the department of surgery, University of Michigan Medical School, Ann Arbor, during the annual meeting of the society, December 13, at the California Club, Los Angeles. Dr. Coller addressed the meeting on "Replacement Therapy Following Operation and Other Types of Trauma." The retiring secretary-treasurer, Dr. Conrad J. Baumgartner, Los Angeles, will assume the presidency in 1946, and Dr. Kenneth E. Smiley, Los Angeles, will become secretary-treasurer.

Violation of Health and Safety Code.—Four persons in Long Beach who violated the health and safety code have been indicted by the grand jury for criminal conspiracy on evidence collected by four state agencies, the bureau of food and drug inspections of the California state department of public health, the department of justice, the state board of pharmacy and the state board of medical examiners. One of the persons, a chiropractor, is the owner of what was known as the Metropolitan Health Institute. Three other persons who were called doctors but were not licensed gave "health" lectures at the institute, which was located on the Pike in Long Beach. Essentially, according to *California's Health*, the institute was a medicine show. Drugs, principally laxatives, were sold under fancy names for fancy prices. It was claimed that these drugs would cure such disorders as arteriosclerosis, Bright's disease, cholecystitis, gallstones, heart and vascular diseases, high blood pressure, dental caries, nephritis, prostate gland disorders, pyelitis, sexual impotence, sinus infection, uremia, ulcers of the stomach and varicose ulcers. The purchaser of the nostrum would be given a certificate at the time of the purchase entitling the purchaser to a free consultation at the clinic. The chiropractor, who owned the business, made the examinations and diagnosis at the clinic. He prescribed the same drugs for the same disorders as had previously been recommended by the spielers. It is estimated that 80 to 90 per cent of the patients were over 60 years of age. The individuals, who were not named in *California's Health*, November 15, are charged with falsely advertising various drugs, representing certain drugs as having an effect on certain diseases, with operating a clinic without a license, practicing medicine without a license and for violation of the Chiropractic Act in the prescribing of drugs.

COLORADO

Harvey Sethman Returns to State Society.—Major Harvey T. Sethman has been relieved of active duty with the Medical Administrative Corps of the Army and has returned to his positions as executive secretary of the Colorado State Medical Society and managing editor of the *Rocky Mountain Medical Journal*. Mr. Sethman has resumed his positions with the society as of December 1. The board of trustees of the society request that addresses for official correspondence and exchange journals be appropriately changed, noting that the office and mailing address of the society and the *Journal* remain at 537 Republic Building, Denver 2, as in the past.

FLORIDA

Survey of Anemia.—The Alachua County Medical Society has endorsed a program now under way to test all school children in the county to determine the cause of borderline anemia. The work is being directed by Dr. Walter E. Wilkins, Raleigh, N. C., U. S. Public Health Service.

Personal.—Dr. Annette M. B. Feaster, St. Petersburg, president of the Pinellas County Medical Society, is the first woman to hold this office. Dr. Feaster has also served as secretary of the society.——Dr. Leland H. Dame, Sebring, has been appointed health director of Orange County to succeed Dr. William P. Rice, resigned.——Dr. Charles G. Hedges, Vallejo, Calif., has been appointed superintendent of the Jackson Memorial Hospital, Miami.

ILLINOIS

Scientist Honored For Work on Betatron.—Donald W. Kerst, Ph.D., Urbana, on November 16 was presented with the $3,000 Cyrus B. Comstock Prize of the National Academy of Sciences in recognition of his invention of the betatron. The award is given every five years for "the most important discovery or investigation in electricity or magnetism or radiant energy." Kerst was selected for the honor in 1943, but the presentation was forbidden by wartime secrecy.

Chicago

Personal.—Leslie D. Reid, assistant superintendent of the Presbyterian Hospital since July 1944, has been named superintendent to succeed Herman Hensel, who resigned because of ill health.

Memorial Services for Peter Bassoe.—Memorial services for Dr. Peter Bassoe, who died November 5, were held in the Presbyterian Hospital December 16 with Dr. James B. Herrick presiding. Dr. Bassoe's life was discussed by Dr. Ludvig Hektoen and his work in the Presbyterian Hospital, Rush Medical College and the University of Illinois by Dr. Ernest E. Irons, in the Chicago Neurological Society, Institute of Medicine of Chicago and American Neurological Association by Dr. Lewis J. Pollock and in the Illinois Psychiatric Society, Chicago Pathological Society and Central Neuropsychiatric Association by Dr. Percival Bailey.

Addition for Experimental Animals.—The fifteenth floor of the Ward Memorial Building, Northwestern University Medical School, is now under construction for the housing of experimental animals. The equipment will be the most modern type, with air conditioned and temperature controlled rooms, stainless steel cages and tile walls and floors. One wing will have animal quarters to be used principally for receiving and housing dogs; the other wing is to have rooms which will be occupied by the Institute of Neurology and other departments that use animals for experimental purposes. The wing on the fourteenth floor, vacated through the addition of the new floor, will be used by the department of experimental medicine.

James Leary Resigns from Daily News.—James C. Leary, science editor of the Chicago *Daily News*, has resigned to become research associate with Lawrence C. Salter & Associates, Consultants for Science, Chicago and New York. Mr. Leary will make his headquarters at the home office of the organization in Chicago. As research associate, Mr. Leary will work on several of the scientific research projects being carried out for various clients of the Salter consultants. Mr. Leary had served on the staff of the Newark, N. J., *Evening News*, Newark *Star-Eagle* and the Chicago bureau of the Associated Press before joining the Chicago *Daily News* in 1935. He is president-elect of the National Association of Science Writers, a member of the committee on information of the Division of Medical Sciences of the National Research Council, a consultant to the Surgeon General of the Army, Major Gen. Norman T. Kirk, and a member of Sigma Delta Chi, the national professional journalistic fraternity, and of the National Press Club, Washington, D. C.

KANSAS

Changes in Health Personnel.—Dr. Harvey L. Bogan, Baxter Springs, has been appointed temporary part time officer of Cherokee County and Dr. Louise V. F. Richmond, Hutchinson, has been named a part time health officer of Reno County. Dr. James E. Wolfe, who for many years has served as part time health officer of the city of Wichita, is now director of the Wichita Health Department, which since July 1 has been operating on a full time basis. Dr. John W. Turner, Wichita, health officer of Sedgwick County, has been granted a year's leave of absence to study at the University of Michigan School of Public Health, Ann Arbor; Dr. Horace Dale Palmer Jr. will serve as assistant health officer during Dr. Turner's absence. Dr. Joseph W. Spearing, Columbus, has been named a member of the state board of health to fill the vacancy caused by the death of Dr. Harry L. Aldrich, Caney.

MAINE

Outbreak of "Mysterious Disease."—Newspapers report the recent closing of the public schools in Waterville because of a "mysterious disease" which caused the death of 4 children and forced nearly 500 of the 2,700 pupils in the city schools to be absent from classes. According to the reports, November 15, Dr. Arthur R. Daviau, city health officer, attributed the outbreak to "diphtheria and something else" which had not been identified. The order not only closed the schools, but banned the pupils from theaters and other public places.

MASSACHUSETTS

State Society Sets Up Postwar Loan Fund.—A Postwar Loan Fund has been set up and all discharged medical officers who were members of the Massachusetts Medical Society in good standing at the time of their entry into the service may apply for loans from this fund. For further information apply to Dr. George L. Schadt, Chairman, Postwar Loan Fund, 8 Fenway, Boston 15.

Eugene Eppinger Appointed Assistant Dean.—Col. Eugene C. Eppinger, formerly physician to students, Harvard Medical School, Boston, has been appointed assistant dean in charge of courses for graduates. He succeeds Dr. Frank R. Ober, who has been doing this work since 1928. The new appointment will be effective January 1. Dr. Eppinger will take over the direction of all courses for graduates, including the refresher courses for returning veterans. The initial plans for these courses have been drawn up by Dr. Chester M. Jones, Boston, and a committee. On the assumption of his new duties, Dr. Eppinger will implement the work of that committee as well as supervise the other courses of instruction for physicians.

Loren Moore in Charge of New Blood Program.—Col. Loren D. Moore, M. C., U. S. Army, retired, who recently became assistant director of the division of biologic laboratories of the Massachusetts Department of Health, will be in direct charge of the new civilian blood service program which has been inaugurated by the state department (THE JOURNAL, November 24, p. 894). Voluntary blood donations will be collected throughout the state by a mobile team, with the assistance of local chapters of the American Red Cross and other community agencies. The team will operate first in those areas which are not at present served by community blood and plasma banks. Collection of blood donations are to begin this month.

MICHIGAN

New Cancer Clinic.—The Women's Cancer Detection Clinic, Inc., was opened in the Hancock School, Detroit, on November 19. The clinic is sponsored by the Detroit Federation of Women's Clubs and is patterned after a number of such clinics functioning throughout the country. No treatments will be given, but, if symptoms calling for medical attention are found, the patient will be referred to her family physician. Dr. Mary Margaret Frazer, Detroit, is medical director. The clinic has been provided by the Detroit Board of Education and the Wayne County Medical Society. It will be maintained by contributions from interested examinees, citizens and organizations who wish to further its work.

Course in Occupational Health and Medicine.—Wayne University School of Occupational Health announces a twelve week orientation course in the field of occupational health and medicine beginning January 7. The course will consist of a presentation of fundamental principles and practices involved in establishing, organizing and operating employee health programs, the administration of employee health programs and the interrelations of medical, engineering (hygiene, sanitation and safety) and personnel activities in industrial organizations. Among those presenting the course will be Dr. Rutherford T. Johnstone, Los Angeles; Dr. Leroy U. Gardner, Saranac Lake, N. Y.; Dr. Oscar A. Sander, Milwaukee; Dr. Louis Schwartz, Washington, D. C.; Dr. Robert A. Kehoe, Cincinnati; Dr. Clarence D. Shelby, Detroit; Dr. Earle A. Irvin, Detroit; William P. Yant, Sc.D., Pittsburgh; J. M. Dallavalle, D.Sc., New York; Don D. Irish, Ph.D., Midland, Mich.; Dr. Grover C. Penberthy, Detroit; Dr. Alfred H. Whittaker, Detroit; Dr. Thomas Dublin, New York; Anna M. Baetjer, Sc.D., Baltimore; Dr. William J. McConnell, New York; Dr. Gordon A. Eadie, Detroit; Dr. Leo H. Bartemeier, Detroit; Dr. Parker Heath, Detroit, and Dr. John M. Murray, Boston. The course will be of special interest to physicians returning from military service.

Woman Anatomist Named Russel Lecturer.—Elizabeth C. Crosby, Ph.D., professor of anatomy, University of Michigan Medical School, Ann Arbor, has been appointed by the board of regents as the Henry Russel Lecturer for 1945-1946. Dr. Crosby is the first woman to be thus honored at the University of Michigan since the annual appointments were begun in the fall of 1925. The honor goes each year to the faculty member adjudged to have made the most significant contribution to the advancement of the field in which he is specializing. Besides the honor of giving the Henry Russel Lecture next May, the selection also includes a stipend paid from the endowment established by Henry Russel, LL.B., of Detroit. Dr. Crosby has been a member of the University of Michigan faculty since 1920. She teaches neuroanatomy to freshmen and graduate students. In her research work she has specialized in the study of the nervous system, the nuclear masses in the brain and the fiber connections of the cell groups. In this connection Dr. Crosby has conducted extensive research in the phylogenetic development of the brain in all of the vertebrates, including man. Dr. Crosby received her Ph.D. at the University of Chicago in 1915.

MISSISSIPPI

Personal.—Dr. Lillian L. Nye, formerly of St. Paul, has been appointed head of the health service of the Mississippi State College for Women at Columbus.——Mrs. Elizabeth Nisbet Wates, Jackson, was recently named state commander of the American Cancer Society, which is opening offices in the Lorenza Building, Jackson. Dr. Emma V. Gay, Biloxi, formerly state commander, has been placed in charge of the regional education program of the American Cancer Society and will also serve as district commander and member of the state executive committee.

Children's Code Commission Formed.—The Mississippi Children's Code Commission was appointed by Governor Thomas L. Bailey on September 24. The commission consists of eighty members representing medical, legal, teaching, civic and service organizations. Physician members include:

Dr. Taswell P. Haney Jr., Laurel, director, Jones County Health Department.
Dr. Charles B. Mitchell, Whitfield, superintendent, Mississippi State Hospital.
Dr. Felix J. Underwood, Jackson, executive officer, Mississippi State Board of Health.
Dr. Estelle A. Magiera, Jackson, director, Child Guidance Center, State Board of Health.
Dr. Virginia F. S. Howard, Jackson, director, Maternal and Child Division, Mississippi State Board of Health.
Dr. Henry C. Ricks, Jackson, director, State Hygienic Laboratory, State Board of Health.

Governor Bailey asked the commission to assume the following responsibilities: study the conditions in the state affecting the welfare of children, and the present laws pertaining thereto; review the functions and facilities of the various agencies and institutions in the state charged with the care, control and protection of children; recommend definite legislation planned as part of a consistent unified whole, for the establishment of minimum standards for adequate care and protection of children in the areas of their needs and furnish informational and educational services throughout the state from the results of the studies and research of the commission. The commission has been divided into four subcommittees on the normal child, the handicapped child, the delinquent child and the dependent child. Among legislation which the commission is being asked to recommend is the premarital blood test, the compulsory school attendance law and a new juvenile court system. The division of maternal and child health is at the present time completing a survey among pediatricians in the state on the pressing needs of children in Mississippi. This information will be considered by the commission.

MISSOURI

Barnard Lecture.—Dr. Cornelius P. Rhoads, New York, gave the seventh annual Barnard Hospital Lecture in the auditorium of the St. Louis Medical Society, November 20. His subject was "Nutritional Aspects of the Cancer Problem."

Pilgrimage to Beaumont Grave.—The St. Louis Medical Society on Thanksgiving Day, November 22, resumed its annual pilgrimage to William Beaumont's grave in Bellefontaine cemetery. Philip A. Shaffer, Ph.D., dean of Washington University School of Medicine, St. Louis, gave the address.

NEW YORK

New Clinic for Children with Cerebral Palsy.—A newly created clinic for children suffering from cerebral palsy has been established at Strong Memorial Hospital in cooperation with the orthopedic and pediatric departments of the hospital and the University of Rochester School of Medicine and Dentistry cooperating. Ten hospital beds will be set up. Physical examinations in the clinic will be coupled with psychiatric tests, and home treatment will be outlined for ambulatory patients. Those needing hospital treatment will be brought into the new hospital division and when able will be moved to the Convalescent Hospital for Children on Beach Avenue. Arrangements have been completed for financial aid to parents unable to meet the cost of hospitalization or treatment.

John Bourke to Direct State Hospital Service.—Dr. John J. Bourke, Albany, on terminal leave as chief medical officer on a Coast Guard assault vessel and formerly deputy director of the State Legislative Health Preparedness Commission, has been appointed director of the statewide survey

of hospital facilities, which was to start about November 15 for the state joint hospital board. Robert T. Landsdale, commissioner of the state department of social welfare, is chairman of the joint hospital board which was recently appointed by Governor Thomas E. Dewey to prepare a state hospital inventory and survey of needed hospital construction. Other members include Dr. Edward S. Godfrey Jr., Albany, commissioner of the state department of health; Dr. Frederick MacCurdy, commissioner of the state department of mental hygiene, as vice chairman, and Assemblyman Lee Mailler as adviser. The joint hospital board is acting for and with the planning commission in making the survey. Governor Dewey, in designating the planning commission as the single agency responsible for the inventory, and in creating the Joint Hospital Board to act with the commission, was acting in accordance with the provisions of the federal hospital construction bill, known as the Hill-Burton bill, just reported to the U. S. Senate from the Committee on Education and Labor. Dr. Bourke's headquarters will be in the offices of the State Postwar Public Works Planning Commission, State Office Building, Albany.

New York City

Conference on Fertility.—The annual conference on fertility of the National Committee on Maternal Health will be held at the Hotel Commodore, February 1-2. Two major topics will be considered, one on the Detection and Induction of Ovulation and the other on Sperm Biology, with particular reference to sperm migration in relation to the female genital tract. The speakers will include investigators from the fields of animal husbandry and from clinical and laboratory studies related to man.

William Schmidt Associated With Joint Distribution Committee.—Dr. William M. Schmidt, formerly medical director for the New York region of the Children's Bureau, U. S. Department of Labor, Washington, D. C., is en route to Europe to supervise the health and medical services on the continent of the Joint Distribution Committee, it was announced December 3. The health activities of the Joint Distribution Committee are an integral part of the extensive relief and rehabilitation program carried out by eighty field workers of the committee in every country of Europe.

Progress of Eye Bank.—About sixty hospitals in nine states are currently cooperating with the Eye Bank for Sight Restoration, 210 East 64th Street, New York. In Greater New York alone, thirty-two hospitals are associated in the movement to make available for distributing healthy corneal tissue for those whose sight may be restored through corneal graft operations by which ocular opacity is overcome, the announcement stated. In addition, eight hospitals in other New York State cities, together with six in New Jersey, three in Connecticut and one each in six other states, have become actively affiliated with the movement. Organized only last February, the eye bank was established for the collection, preservation and distribution of healthy corneas, which may be obtained only from persons either living or immediately after death. As corneas may be preserved and utilized for transplanting to the eyes of others for only seventy-two hours, speedy collection and distribution are essential as soon as they are obtained. Whenever cooperating hospitals have eyes available, the Red Cross Motor Corps rushes them to the Eye Bank for distribution to persons requiring the corneal graft operation.

NORTH CAROLINA

Personal.—Dr. Robert T. Stimpson, Raleigh, director of the Bureau of Vital Statistics of the state board of health since 1934, resigned October 1 to go into general practice in Winston-Salem.——Dr. George F. Baier Jr. has resigned as coroner of Buncombe County.

Psychologist Named in New Program.—Donald S. Carter, New York, has been named clinical psychologist for the state mental hospitals in North Carolina, newspapers report. The appointment marks the first time a full time clinical psychologist has been named in the state's mental program. The appointment was announced to the press by Dr. David A. Young, general superintendent of mental health for the state hospitals of North Carolina, also a newly created position (THE JOURNAL, July 14, p. 819). Mr. Carter will have a permanent office in the state hospital in Raleigh.

Physician Named to Direct Surplus Properties Program.—Dr. Sylvester D. Craig, Winston-Salem, president of the North Carolina State Board of Health, has been named to direct the surplus properties program of the North Carolina State Board of Health. Dr. Craig will act as liaison officer in the handling of matters affecting surplus government property that can be used by hospitals and public health agencies in North Carolina. He will advise with hospitals and health agencies on what suitable surplus property is available, complete their needs and requests, and transmit the information to the proper authorities in Washington.

OHIO

John Caughey Appointed Assistant Dean.—Dr. John L. Caughey Jr., New York, who has for four years been studying the human constitution in relation to disease at Presbyterian Hospital, New York, has been named assistant dean at Western Reserve University School of Medicine, Cleveland, a newly created position. Dr. Caughey will supervise admissions and keep in touch with the progress of the students. He will also continue his research.

Prentiss Award Goes to Charles Winslow.—The Elisabeth S. Prentiss National Award in health educational for 1945 was presented to Charles-Edward A. Winslow, Dr. P.H., New Haven, Conn., during a special program at the Cleveland Health Museum, November 27. The principal address was given by Dr. Winslow on "Ten Unattained Goals of Public Health." Dr. Robert L. Dickinson, New York, who was guest of honor, spoke on "Sex Education—Sex Evolution." The program also included James R. Angell, New Haven, Conn., president emeritus, Yale University School of Medicine, and Dr. William W. Peter, Washington. This was the second award of the Prentiss Prize (THE JOURNAL, Jan. 15, 1944, p. 181; Nov. 18, 1944, p. 781).

Advisory Committee on Child Hygiene.—Dr. Roger E. Heering, state health commissioner, has appointed an advisory committee to the division of child hygiene of the Ohio State Department of Health, following consultation with the council of the state medical association. Members of the committee include Dr. James G. Kramer, Akron; Dr. Robert A. Lyon, Cincinnati; Dr. Loyal E. Leavenworth, Canton; Dr. Dana W. Cox, Columbus; Dr. John A. McNamara, Marion, and Dr. Herbert D. Chamberlain, McArthur. The committee will act in an advisory capacity to the division, of which Dr. Susan P. Souther, Columbus, is director, on matters of policy and procedure in the operation of the department's maternal and child hygiene programs.

WASHINGTON

John Fouts Named Health Officer of King County.—Dr. John D. Fouts, London, Ky., has been appointed health officer of King County, filling the vacancy that occurred when Dr. Emil E. Palmquist accepted an appointment as city health commissioner of Seattle (THE JOURNAL, July 28, p. 964).

New Editors.—Dr. Robert N. Rutherford, Seattle, is the new editor of the *Western Journal of Surgery, Obstetrics and Gynecology*, succeeding Dr. Goodrich C. Schauffler, Portland, Ore.——Dr. Joseph M. Aspray, Spokane, has been appointed editor of the Bulletin of the Spokane County Medical Society.

State Medical Board.—Gov. Mon C. Wallgren recently appointed Drs. Alexander Grinstein, Seattle, Thomas Ingham, Olympia, and John C. Lindsay, Ritzville, as members of the Washington State Board of Medical Examiners. Retiring members are Drs. Philip C. Kyle, Tacoma; David Metheny, Seattle, and Robert L. Rotchford, Spokane.

Blood Bank Building.—Ground was broken by Mayor William F. Devin of Seattle for the new home of the King County Central Blood Bank. The building is to be constructed on the southwest corner of Terry Avenue and Madison Street on property donated by Dr. Simon Maimon Samuels, Seattle (THE JOURNAL, June 23, p. 606). The blood bank recently completed its first anniversary.

WEST VIRGINIA

Financial Responsibility of Cancer Care.—The West Virginia State Department of Public Assistance will be responsible for payment for care of any case of cancer referred by it to any hospital or placed under the care of a doctor up to the point at which responsibility for such care and treatment is assumed by the division of cancer control of the state health department. When information is received from the division of cancer control that a case is incurable, the department of public assistance will assume the cost of necessary palliative treatment or other necessary care if the patient meets the eligibility requirements of the department. In all cases the assumption of responsibility for care of incurable cases by the department will depend on the economic eligibility of the indi-

vidual as measured by department standards. The determination of such incurability will be made by the division of cancer control. The new regulations, which are effective immediately, have been agreed on by Mr. Robert F. Roth, director of the department, and Dr. Paul R. Gerhardt, director of the division of cancer control.

GENERAL

Conference of Presidents.—A Conference of Presidents of the state medical societies called by the California and Michigan state medical societies in Chicago, December 2, elected Dr. Andrew S. Brunk, Detroit, president. Dr. Philip K. Gilman, San Anselmo, Calif., was named president-elect and Mr. Harvey T. Sethman, Denver, was chosen secretary-treasurer.

Christopher Shaw Named Educational Director for College of Physicians.—Dr. Christopher C. Shaw, formerly of Bellows Falls, Vt., has been appointed educational director of the American College of Physicians, effective November 1. The position is a newly created one. Dr. Shaw, under the executive secretary of the college, has immediately taken over the direction of the postgraduate courses, research fellowships, clinical fellowships, program for the aid of members returning from the armed services and other educational features in the college program. Dr. Shaw was recently separated from active duty in the Navy.

Change in Examination in Ophthalmology.—As a result of transportation difficulties the examination of the American Board of Ophthalmology originally scheduled to be held in Los Angeles, January 28-31, has been changed to San Francisco, June 22-25. Other examinations will be Chicago, January 18-22; New York, about April 10-13, and Chicago, October 9-12. A new ruling requires that previously accepted candidates mail their lists of surgery to the board office at least sixty days prior to their examination. All new applicants are now required to send their list with their application. Dr. S. Judd Beach, Portland, Maine, is secretary-treasurer of the board.

New Assistant Medical Director for Infantile Paralysis Foundation.—Dr. Hart E. Van Riper, who since March 1944 has been medical director of the James M. Jackson Memorial Hospital, Miami, Fla., has been appointed assistant medical director of the National Foundation for Infantile Paralysis as assistant to Dr. Don W. Gudakunst, New York, medical director. Dr. Van Riper will supervise the foundation's extensive program of medical care and treatment for infantile paralysis patients throughout the United States. A graduate of the University of Pennsylvania School of Medicine, Philadelphia, in 1930, Dr. Van Riper served in 1941 as assistant director for maternal and child health in the division of health services of the U. S. Department of Labor.

National Physicians Committee Holds Annual Conference.—The National Physicians Committee for the Extension of Medical Service held its sixth annual conference of the professions and industries on the extension of medical service, group insurance programs and prepayment medical care plans. The meeting was at the Waldorf-Astoria, New York, November 26. Among the speakers on the program were Dr. Claude Robinson, Princeton, N. J., "What People Think About the Distribution of Medical Care and Payment of Costs"; Herbert D. Simpson, Ph.D., Evanston, Ill., "Preliminary Report on Nationwide Study of Physician Sponsored Medical Care Plans," and Dr. Morris Fishbein, Chicago, "Federal Subsidy for Hospitals and Scientific Research—Pending Legislation—Postwar Medical Service—Position and Prospects." The morning session was addressed by Mr. Edward F. Stegen, associate administrator of the National Physicians Committee, on "Physician Cooperation and Support."

Borden Undergraduate Awards.—The annual award of $500 for excellence of research has been established at twenty-two medical schools in the country in an effort to assist the schools in developing a greater interest among undergraduates in medical research. The first school to make the award in the program is Duke University (THE JOURNAL, September 15, p. 223). Other universities which are participating in the program are California, Chicago, Columbia, Cornell, Harvard, Iowa, Johns Hopkins, Michigan, Minnesota, New York, Northwestern, Ohio, Pennsylvania, Rochester, Stanford, Tulane, Vanderbilt, Washington, Western Reserve, Wisconsin and Yale. The Borden Foundation has deposited $2,500 with each university, with the understanding that the sum will be used by the university to establish an annual award to be known as the Borden Undergraduate Research Award in Medicine. Only one award of $500 is to be made during any one calendar year, and the awards will be made for a period of not less than five years.

Van Meter Prize Award.—The American Association for the Study of Goiter again offers the Van Meter Prize Award of $300 and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland. The award will be made at the annual meeting of the association, which will be held in Chicago in April or May 1946, provided essays of sufficient merit are presented in competition. The competing essays may cover either clinical or research investigations, should not exceed three thousand words in length, must be presented in English, and a typewritten double spaced copy sent to the corresponding secretary, Dr. Thomas C. Davison, 207 Doctors Building, Atlanta 3, Ga., not later than February 20. A place will be reserved on the program of the annual meeting for presentation of the prize award essay by the author if it is possible for him to attend. The essay will be published in the annual proceedings of the association. This will not prevent its publication, however, in any journal selected by the author.

Society News.—A joint conference will be held in Chicago, April 8-13, by the American Association of Industrial Physicians and Surgeons, the American Industrial Hygiene Association, the National Conference of Governmental Industrial Hygienists, the American Association of Industrial Nurses and the American Association of Industrial Dentists.——The next international assembly of the Interstate Postgraduate Medical Association of North America will be held at the Cleveland Public Auditorium, Cleveland, October 15-18.——The Federation of American Societies for Experimental Biology will meet in Atlantic City beginning March 11. The federation is composed of the American Physiological Society, the American Society of Biological Chemists, the American Society for Pharmacology and Experimental Therapeutics, the American Society for Experimental Pathology, the American Institute of Nutrition and the American Association of Immunologists.——The eleventh annual meeting of the Mississippi Valley Medical Society will be held September 25-27 at the Hotel Jefferson, St. Louis. Owing to the fact that no meeting was held in 1945, all the officers of the society have been retained for another year. These include Drs. Grayson L. Carroll, St. Louis, president; Walter A. Sternberg, Mount Pleasant, Iowa, president-elect; Louis H. Jorstad, St. Louis, Elmer E. Nystrom, Peoria, Ill., and Ernest J. Lessenger, New London, Iowa, vice presidents, and Harold Swanberg, Quincy, Ill., secretary-treasurer.

Special Society Elections.—Mr. Basil O'Connor, chairman, American Red Cross, was elected chairman of the board of governors of the League of Red Cross Societies at a recent three day meeting in Paris, the first since 1938. Although the meeting was called for the purpose of electing officers and planning the peacetime program of the league, its primary concern was rebuilding the worldwide character of the Red Cross movement by revitalizing the member societies, some of which are now struggling for existence in the wake of war.——At the annual meeting of the Western Surgical Association in Chicago, November 30-December 1, Dr. Arthur R. Metz, Chicago, was named president; Drs. Herbert H. Davis, Omaha, and LeRoy B. Sherry, Pasadena, Calif., vice presidents; Dr. Warren H. Cole, Chicago, secretary, and Dr. William M. Mills, Topeka, Kan., treasurer. The 1946 meeting of the association will be held in Memphis, Tenn., December 9-11.——At the third annual meeting of the American Otorhinologic Society for the Advancement of Plastic and Reconstructive Surgery, Inc., November 15, the following officers were chosen: Drs. Alfred Schattner, New York, president; Jacob Daley, New York, vice president; Benjamin H. Shuster, Philadelphia, treasurer, and Norman N. Smith, New Haven, Conn., secretary.——Dr. William S. McEllroy, Pittsburgh, was chosen president-elect of the Association of American Medical Colleges during its annual meeting in Pittsburgh October 29-31. Dr. John W. Moore, Louisville, was installed as president. Other officers included Joseph C. Hinsey, Ph.D., New York, vice president; Dr. Fred C. Zapffe, Chicago, secretary, and Dr. Arthur C. Bachmeyer, Chicago, treasurer. The 1946 meeting will be held in New Orleans October 28-30.

CORRECTION

Intravenous Anesthesia for Orthopedic Surgery.—In the article by Dr. George J. Thomas in THE JOURNAL, November 17, under "Complications and Their Management" on page 791 and in line 9 of this paragraph, "oxide and nitrogen" should read "oxide and oxygen," the sentence reading "However, occasionally it is found necessary to administer nitrous oxide and oxygen."

Foreign Letters

LONDON

(From Our Regular Correspondent)

Nov. 17, 1945.

A New British Antimalarial Drug

The loss of Java early in the war resulted in a worldwide shortage of quinine. Much was done in this country and the United States to find new drugs for the treatment of malaria. A new drug has been discovered in the laboratories of the Imperial Chemical Industries, a British firm, which is to be distributed under the name of paludrine. Its composition is not disclosed but the following information was reported to the Medical Research Council during the development of the substance. Early in 1942 a group of chemists and biologists began the search for a new synthetic antimalarial drug which could not only replace quinine but be more effective in preventing and treating malaria. Antimalarial activity was found in several compounds, but not until 1944 was a satisfactory compound synthesized. It was remarkably active against experimental infections of chicks with Plasmodium gallinaceum and other forms of avian malaria. Successful clinical trials were made at the Liverpool School of Tropical Medicine by Dr. A. R. D. Adams and Professor T. H. Davey. Supplies of the compound were sent by air to Australia, where its action in preventing malaria in volunteers exposed to infected mosquitoes was investigated. Other studies are in progress in medical schools in Britain and in India.

The new compound is a white powder which does not cause yellowing of the skin, as does mepacrine hydrochloride. The chemical formula is simple and differs fundamentally from other antimalarials. It is rapidly absorbed when given by mouth but excreted slowly, about a third in the urine. It is well tolerated in doses up to 0.5 Gm. twice daily. Gastrointestinal irritation is the only untoward effect so far observed from large doses. This reaction can be avoided by dividing the dose. The treatment is doses of the drug twice a day for fourteen days. The smallest amount that will terminate an attack of benign tertian malaria appears to be 10 to 50 mg., a fifteenth of the maximum tolerated dose. Unfortunately (as with quinine and mepacrine hydrochloride) relapses are frequent. The response of malignant tertian malaria is similar but relapses are less frequent. The effect on quartan malaria has not yet been studied. As a preventive paludrine seems equal or superior to mepacrine hydrochloride and much superior to quinine.

Fiftieth Anniversary of Roentgen's Discovery

The fiftieth anniversary of Roentgen's discovery of the x-rays was commemorated by an all day conference of the Royal Society attended by British, Swedish, French and Dutch scientists. The president, Sir Henry Dale, remarked that much of the early interest in the discovery centered in its potential value to medicine and surgery, a value that has steadily grown. To physical science it was a discovery which has revolutionized fundamental concepts of physics and chemistry, which have culminated in nuclear fission. Physics at the end of 1895 was regarded as an exact science presenting a field of knowledge in which it was unlikely that any startling new chapter would be opened. The discovery of the x-rays came as a stimulating shock to this attitude.

Sir Lawrence Bragg brought to the meeting two reprints dedicated and sent to J. J. Thomson by Roentgen, their author. They were dated December 1895 and March 1896. The earlier paper contained a measurement of the relative transparency to x-rays of different materials. It showed the bones of the hand and a compass visible through a metal box. These papers showed that Roentgen realized the implications of what we are likely to regard as a chance discovery.

At a meeting held at the Royal Society of Medicine the minister of health, Mr. Bevan, honored the devoted band of workers who had suffered death and injury in applying and developing Roentgen's discovery. It it noteworthy that not one of Roentgen's countrymen were present at either of these functions.

Honor for an American Pathologist

The Parkes Weber prize and medal of the Royal College of Physicians has been awarded to Dr. Eugene L. Opie, professor of pathology, Cornell University, for his work on the pathogenesis of tuberculosis of the lungs.

PARIS

(From Our Regular Correspondent)

Nov. 20, 1945.

Antagonists of Histamine

In such conditions as urticaria, asthma, eczema and herpes, in arsenical erythrodermia and in pruriginous lesions the intervention of a histamine factor must be taken into consideration. The histamine factor plays a part also in the production of visceral infarcts. In the blood of a patient affected by urticaria and Quicke's edema, Cerqua and Gajdas have discovered histamine in amounts of 200 to 300 micrograms per liter as against 30 to 60 micrograms per liter in the normal physiologic state.

In 1940 Halpern proved the antihistamine action of antergan, or 2339 R. P., since employed by clinicians with variable results. Antergan acts in serum accidents so that pruritus disappears half an hour after treatment; but arthralgias are more resistant. In two thirds of the cases of urticaria the results are favorable, especially in alimentary urticaria. Good results are also obtained in acute eczema, with less uniform achievements in the subacute and chronic forms. Antergan also acts favorably on medicinal dermatosis. In asthma (particularly as a preventive measure) from one third to one half of the cases are benefited. In migraine, results are not uniform. No results have been obtained in traumatic shock, postoperative shock and shock from burns. Antergan is often poorly tolerated and causes digestive and nervous disturbances: gastric burns, anorexia, nausea or vertigo. Children tolerate it better than adults. Recently at the Société de biologie, Bovet, Horclois and Walthert described experiments made on guinea pigs with a new antagonist of histamine: neoantergan, or 2786 R. P., which is less toxic, more active and better tolerated. The dosage of 1 to 10 mg., as against 20 mg. of antergan, protects the guinea pig against anaphylactic (or histamine) shock. The authors remarked also that neoantergan in the guinea pig impedes or diminishes the increase of permeability of cutaneous capillaries caused by an intradermal injection of histamine. At a meeting of the Société médicale des hôpitaux de Paris, Decourt described the clinical results obtained with neoantergan. He has found that its activity in man is three times greater than that of antergan. To attenuate untoward reactions of neoantergan it is necessary to start with a small dose, for adults 0.1 Gm. orally administered during meals and then to increase the doses rapidly (as a rule to 0.6 or 0.8 Gm. daily). The doses vary to a great extent from one patient to another and from day to day in the same patient. In case of nontolerance (nausea and gastric spasms) the original dose of 0.1 Gm. three times daily during meals should be renewed until it is well tolerated (as a general rule from twenty-four to forty-eight hours). Interrupted treatment is begun again with a small dose. It is possible to use the parenteral route for administration of neoantergan. With neoantergan, 90 per cent of the cases of asthma show improvement without using poorly tolerated doses.

Synthetic antihistamine does not prevent the release of histamine but seems to render the tissues incapable of reacting to histamine (a similar phenomenon characterizes the atropine-acetylcholine antagonism). Neoantergan shows an analogous chemical structure to histamine, and it is possible that this action is a phenomenon of competition.

In October 1945 at the sixty-fourth congress of the French Association for the Advancement of Sciences, Halpern disclosed, in his lecture on "Synthetic Antihistamine," that he is now making experiments on animals with a new antihistamine product, 3015 R. P. This new product belongs to the same series as antergan and neoantergan but contains neither aniline nor pyridine. The author did not, in this lecture, reveal its chemical formula. In the guinea pig this product showed an antihistaminic power from eight to ten times higher than that of neoantergan.

Intravenous Procaine Hydrochloride

Intravenous procaine hydrochloride, 5 to 10 cc. of 1 per cent solution, is often employed to diminish the pathologic effect of histamine. Justin Bezançon and R. Fleury used procaine 5 cc. intravenously in herpes and postherpetic pain. This treatment alleviates the pain in recent herpes but does not affect the evolution of the herpes. Intra-arterial procaine is also employed in the treatment of embolism and thrombosis. In order to be efficacious, this treatment must be begun as early as possible.

Vitamin D_2 for Lupus Vulgaris

Charpy of Dijon has developed a method of treating tuberculosis of the skin with strong doses of vitamin D_2 and calcium gluconate. Charpy prescribes 5 mg. of vitamin D_2 and 1 to 2 liters of milk daily or 0.5 Gm. of calcium gluconate by mouth twice daily. The patient is placed on a salt poor diet. As a rule the treatment lasts three months. The author was successful in all of the 38 cases treated. In the *Revue médicale française* Gougerot and Gaullier mention only 3 failures in 21 cases treated. Degos explained his modification of Charpy's technic: He prescribes in the first week three doses of 15 mg. of vitamin D_2, the two following weeks two doses, then one dose weekly for sixteen weeks, and calcium gluconate 0.5 Gm. twice daily. The best results are obtained in lupus vulgaris; this treatment is far less efficacious in other forms of cutaneous tuberculosis. In order to avoid accidents such as sclerosis, arterial calcification or the possible toxic action of strong doses of D_2, the authors stress the use of vitamin D_2 chemically pure in alcoholic solution. The oil solution is less active or inactive.

Application of Electroencephalography in Legal Medicine

At the sixty-fourth Congress of the French Association for the Advancement of Science, held in October, A. Baudoin, dean of the Faculté de médecine, and Fischgold discussed the rational use of electroencephalography in legal medicine. Several preliminary conditions must be considered, such as the standardization of the technic of recording, a clear definition of the normal rhythm and its alterations, knowledge of metabolic factors (glycemia 0.002) which control the cerebral rhythm and a consideration, on the basis of extensive statistics, of the percentages of normal and abnormal tracings in disorders pertaining to legal medicine. Legal medicine can, however, profit by the use of the electroencephalographic technic in doubtful cases of epilepsy. In persons said to have nonverified crises of grand mal the presence of wave and spike *(pointes ondes)* tracings will indicate grand mal, whereas a normal tracing taken immediately after an alleged crisis will make certain patients open to suspicion as malingerers. In subjects showing abnormal psychic behavior a tracing with waves and spikes will indicate epilepsy, whereas a normal tracing is not conclusive. In statistics comprising all forms of epilepsy, Gibbs and Lennox find that 29.3 per cent of the epileptic show wave and spike tracings, 28.7 per cent show abnormal tracings and 32 per cent reveal tracings which are normal or within the limits of normal. According to Baudoin, Fischgold and Remond, in cases of idiopathic grand mal in young patients examined immediately after a crisis only 2 per cent show normal tracings.

In cases of head injuries the results of electroencephalographic examinations must be compared with special examinations: radiography of the skull, examination of the fundus of the eye and of the acoustic nerve and of pneumography. The normal or abnormal tracing must be interpreted on the basis of previously established statistics.

According to Puech, Fischgold and G. and J. Verdeaux the statistics reveal that there is an improvement of the tracing in the year following the trauma. Thirteen per cent improve in the first fifteen days, with the normal rate rising to about 50 per cent by the end of the first year. If epilepsy occurs there is a reappearance of the anomalies; on the other hand, a subjective syndrome alters the tracing far less. Evident alterations are to be found in 8 per cent of the totally cured traumatic patients, in 20 per cent of those showing a subjective syndrome and in 33 per cent of the traumatic patients. The alteration does not have absolute value, but its presence renders more or less probable the organic basis, the severity and the existence of the post-traumatic syndrome.

In carbon monoxide intoxication the tracing remains altered for a variable period; its normalization accompanies either a cure or definitive lesions. The greatest care is necessary in the interpretation of the tracings and the practical conclusions which can be derived from them.

MEXICO

(From Our Regular Correspondent)

Nov. 5, 1945.

First Inter-American Meeting on Typhus

The first Inter-American Meeting on Typhus, sponsored by the Mexican Secretariat of Public Health and Welfare, by the Institute of Inter-American Affairs and by the Pan American Sanitary Bureau in Washington, D. C., and organized by the Mexican Typhus Fever Commission, was held in Mexico City during the week of October 7 to 13. The sessions were held in the School of Public Health and Hygiene, with the exception of one, which took place in the typhus laboratory of the City General Hospital.

The opening session was presided over by Dr. Francisco Castillo Nájera, secretary of foreign relations, Mr. Jaime Torres Bodet, secretary of public education and Dr. Manuel Martínez Baez, undersecretary of public health and welfare and president of the Mexican Typhus Committee. Dr. Miguel E. Bustamante, epidemiologist of the Institute of Health and Tropical Diseases, introduced the distinguished guests and other scientists. Dr. Rolla E. Dyer, director of the National Institute of Health in Bethesda, Md., and president of the Pan American Typhus Commission, summarized what had been done in the study and treatment of the rickettsial diseases.

In the Monday session, general reports on the status of rickettsial diseases in the American continent were made by Drs. Juan Antonio Montoya, member of the Pan American Typhus Commission, Gerardo Varela of the Mexican Committee on Typhus, Julio Roberto Herrera of Guatemala, Luis Patiño Camargo of Colombia, Attilio Machiavello of Ecuador, who represented several South American countries on the Pacific Coast, Eugenio Suarez from the republic of Chile, Norman H. Topping of the National Institute of Health in Bethesda, Md., and several others.

The sessions held on Tuesday, Wednesday and Friday were devoted to the reading of papers, discussion and comments on the epidemiology of typhus, procedures and methods for the diagnosis of rickettsiosis, the pathology, hematology, symptomatology, therapeutics and prophylaxis of typhus and other rickettsial diseases, problems of nomenclature and reports on the present knowledge of rickettsiosis and on the control of typhus during war.

Among the delegates of the United States who attended the meeting were Drs. Rolla E. Dyer and Norman H. Topping of the National Institute of Health in Bethesda, Md.; Drs. Joseph E. Smadel and Arthur C. Allen of the United States Army and Otto L. Burton of the United States Navy; Drs. Hugh H. Smith and Fred L. Soper of the International Health Division of the Rockefeller Foundation; Col. John D. Yeagley and Drs. Charles L. Von Poole and Theodore L. Gandy of the Institute of Inter-American Affairs, Washington, D. C.; Dr. R. R. Parker of the Rocky Mountain Laboratory, Hamilton, Mont.; Dr. Herald R. Cox of the Lederle Laboratories, Pearl River, N. Y.; Dr. Fred Stimpert of the Biological Research Laboratory, Parke, Davis & Co., Detroit; Drs. H. H. Stage and E. F. Knipling of the Department of Agriculture, Washington, D. C.; S. H. Bohles of the Texas State Health Department; Dr. Federico Musacchio, local health officer in Laredo, Texas; Drs. George R. Hermann and Ludwig K. Agnistein of the University of Texas Medical Branch; Dr. Malcolm H. Soule from the University of Michigan Medical School; Dr. Gustave Freeman from the University of Chicago School of Medicine; Dr. James A. Reyners of the University of Notre Dame; Dr. Leslie A. Chambers of the University of Pennsylvania School of Medicine; Dr. Henry A. Pinkerton from the St. Louis University School of Medicine and Dr. Harold A. Wood, Attilio Machiavello and Juan Antonio Montoya of the Pan American Sanitary Bureau's Typhus Commission.

Delegates from the Latin American republics were Dr. Eugenio Suarez of Chile, Dr. Roberto Nevares Vázquez of Ecuador, Dr. Luis Patiño Camargo of Colombia, Dr. Antonio Trueba Colominos from the Dominican Republic, Drs. Julio Roberto Herrera, Enrique Padilla, Carlos Tejeda and Daniel Jobbins, all of Guatemala, Dr. Roberto R. Boice of El Salvador, Drs. Arturo Curbelo, Alberto Recio and Guillermo Lage from Cuba and, from Mexico, Dr. Manuel Martínez Baez, undersecretary of public health and welfare, and Dr. Guillermo Román y Carrillo, professor of epidemiology in the School of Health and Hygiene, president and secretary of the Mexican Typhus commission, respectively; Dr. Maximiliano Ruiz Castañeda and Roberto Silva Goytia of the Typhus Laboratory; Luis Vargas, Gerardo Varela, Miguel E. Bustamante and Alberto P. León of the Institute of Health and Tropical Diseases; Carlos Ortiz Mariotte from the Division of Epidemiology; Samuel Morones and Santiago Castro Estrada, professors of communicable diseases in the School of Public Health and Hygiene; José Bustos, state health officer in the state of Veracruz; Alfonso Angelini, epidemiologist of the Federal District Health Office; George A. Payne, representative of the International Health Division, and E. Harold Hinman, representative of the Institute of Inter-American Affairs, both in Mexico, and Dr. González Guzmán, dean of the Faculty of Medicine.

Among the recommendations made are (1) prophylaxis by the use of dead germs, vaccines for immunization against typhus and other rickettsial diseases and the eradication of insects and delousing of animals, (2) the appointment of a technical inter-American committee for the study of a uniform and coordinated nomenclature, (3) the recording of rickettsial diseases and (4) the organization of a special department to deal with the control of rickettsial diseases with laboratory facilities for diagnosis in countries where such diseases prevail.

The Pan American Typhus Commission held three joint sessions, which were presided over by Dr. Rolla E. Dyer, president, and Dr. Juan Antonio Montoya, acting secretary.

Dr. Gustavo Baz, secretary of public health and welfare, presented the members of the meeting with a silver medal on which were engraved the figures of Ricketts, Nicolle and Zinsser. Reprints of a book entitled "Two Studies on Typhus" by the late Mexican clinician Dr. Miguel Jiménez, which was issued in 1876, were distributed.

The Fiftieth Anniversary of the Death of Louis Pasteur

The commemoration of the fiftieth anniversary of the death of the French scientist Louis Pasteur, organized by the Mexican Society of Natural History under the auspices of President Manuel Avila Camacho, Dr. Gustavo Baz, secretary of public health and welfare, Mr. Jaime Torres Bodet, secretary of public education, Mr. Marte R. Gomez, secretary of agriculture, Mr. Javier Rojo-Gómez, governor of the Federal District, Mr. Genaro Fernández-MacGregor, dean of the National University of Mexico, and Mr. Maurice Garreau Dombate, French ambassador, was celebrated during the week of September 24 to 30. The unveiling of pictures and plates of Pasteur took place in the General Hospital, in the National Institute of Hygiene, Popotla, D. F., and in the Faculty of Medicine. A public meeting was held on Saturday morning the 28th before the Pasteur Memorial in Cuauhtemoc Square; the final ceremony took place in the Beaux Arts Theater on September 30, presided over by Dr. Baz. Ambassador Garreau Dombate, Dr. Manuel Martínez Baez, undersecretary of public health and welfare, and Professor Enrique Beltrán, secretary of the Mexican Society of Natural History, spoke on the life of Louis Pasteur and on the importance of scientific research from the social point of view. A large edition of the Biography of Louis Pasteur, written by Dr. Alfonso Pruneda, life secretary of the National Academy of Medicine, was distributed among the people.

Mexican Delegation to the Second International Conference on Agriculture and Nutrition

On October 12 Drs. Manuel Martínez Baez, undersecretary of public health and welfare, and Francisco de Paula Miranda, director of the National Institute of Nutrition, took one of the Pan American clippers for Quebec to attend, as members of the Mexican delegation, the second International Conference on Agriculture and Nutrition, to be held in Quebec.

Marriages

EDWARD B. MARENUS, Shamokin, Pa., to Miss Frances Barbara Kremer of Highland Park, N. J., September 20.

LONGSTREET CAVETT HAMILTON, Jackson, Miss., to Miss Johnette Blackledge of Laurel in New Orleans recently.

JOHN JAMES SMITH, Rahway, N. J., to Dr. Rosemary Veronica Gorman of Kingston, N. Y., November 28.

TERRY E. LILLY JR., Kansas City, Mo., to Miss Lillian Ethel Townsend in Lebanon, N. H., November 18.

CECIL JENNINGS HAWES, Conway, S. C., to Miss Ann Jackson Brattan of Woodbury, Tenn., October 6.

JOSEPH MARTIN FORD, Huntington, W. Va., to Miss Eliot James of New York, November 22.

THOMAS KERR LAIRD to Miss Ruth Lee Carper, both of Montgomery, W. Va., at Pocahontas, Va., November 15.

CHARLES M. SHAFFER to Miss Vivian Maxine Watson, both of Carlisle, Pa., October 18.

JACK R. JARVIS, Towson, Md., to Miss Mary Irene Gracy in Lakeland, Fla., September 6.

STANLEY MARGOSHES, Lancaster, Pa., to Miss Doris Smith of Brooklyn, November 16.

Deaths

Guy Whitman Leadbetter ✠ Washington, D. C.; born in Bangor, Maine, in 1893; Johns Hopkins University School of Medicine, Baltimore, 1920; clinical professor of surgery at George Washington University School of Medicine; specialist certified by the American Board of Orthopaedic Surgery, Inc.; member of the American Orthopedic Association; president-elect of the American Academy of Orthopaedic Surgeons; secretary of the committee on orthopedic surgery of the National Research Council; orthopedic consultant to the Secretary of War during World War II; known for original work on the reduction of the fracture of the neck of the femur; on the staffs of the Children's Hospital, Washington Sanitarium and Hospital, George Washington University Hospital, Gallinger Municipal Hospital and the Providence Hospital; chief, orthopedic service, Central Dispensary and Emergency Hospital, where he died November 11, aged 52, of coronary occlusion.

Kendal Phelps Frost ✠ Los Angeles; Rush Medical College, Chicago, 1916; born in Los Angeles on Nov. 9, 1890; clinical professor of medicine (dermatology) at the University of Southern California School of Medicine; specialist certified by the American Board of Dermatology and Syphilology; member of the American Dermatological Association, the Los Angeles Academy of Medicine and the American Academy of Dermatology and Syphilology; fellow of the American College of Physicians; served during World War I; attending dermatologist at the Hospital of the Good Samaritan and St. Vincent's Hospital; chairman of the department of dermatology and syphilis, Los Angeles County General Hospital; consulting dermatologist, Children's Hospital and the Santa Fe Coast Lines Hospital; died September 27, aged 54, of malignant hypertension.

Clement R. Jones ✠ Pittsburgh; Columbus Medical College, 1892; born in Waynesburg, Ohio, Nov. 30, 1871; assistant professor of medicine at the University of Pittsburgh School of Medicine; professor of the principles of medicine, University of Pittsburgh School of Dentistry; certified by the American Board of Internal Medicine; member of the American Gastro-Enterological Association; fellow of the American College of Physicians, of which he had been treasurer and ex-regent; served as president of the American Therapeutic Society; on the staffs of the Pittsburgh City Home and Hospital, Mayview, Mercy and Presbyterian hospitals and Falk Clinic; died September 3, aged 73.

Samuel William Spencer Toms ✠ Nyack, N. Y.; born in Elyria, Ohio, Dec. 11, 1861; University of Buffalo School of Medicine, 1891; member of the American Academy of Ophthalmology and Otolaryngology; member of the House of Delegates of the American Medical Association in 1911, 1913 and 1914; fellow of the New York Academy of Medicine; served as health officer of South Nyack; on the staff of the Nyack Hospital; captain, medical reserve corps, U. S. Army, not on active duty; member and formerly chairman of the publication committee of the *New York State Journal of Medicine;* died August 22, aged 83, of generalized arteriosclerosis.

Fred Dundas Jackson, Detroit; Detroit College of Medicine and Surgery, 1921; associate professor of clinical medicine at his alma mater, now known as the Wayne University College of Medicine; served during World War I; director of the outpatient department at the Receiving Hospital for many years; on the staffs of the Alexander Blain, Florence Crittenton and Providence hospitals; formerly in charge of the medical division of the Franklin Street Settlement Clinic; died in the U. S. Marine Hospital July 31, aged 54, of arteriosclerotic heart disease.

Joseph Bruce Alexander, Mansfield, Ohio; Eclectic Medical College, Cincinnati, 1918; formerly associate professor of surgical anatomy and principles of surgery at his alma mater; died in Cincinnati August 22, aged 57.

William Simon Ankenbrock, Indianapolis; Indiana University School of Medicine, Indianapolis, 1924; member of the American Medical Association; captain, medical corps, Army of the United States, not on active duty; on the staffs of St. Vincent's, Methodist and City hospitals; died September 28, aged 49, of cerebral hemorrhage.

Edward Louis Artman, Milwaukee; University of Pennsylvania School of Medicine, Philadelphia, 1913; served during World War I; formerly on the staffs of the Veterans Administration facilities in Fort Bayard, N. M., Los Angeles and Huntington, W. Va.; on the staff of the Veterans Administration Facility in Wood, where he died September 7, aged 54, of coronary occlusion.

Edward Saunders Babcock Jr. ✠ Sacramento, Calif.; University of California Medical School, San Francisco, 1923; specialist certified by the American Board of Pediatrics, Inc.; member of the American Academy of Pediatrics; past president of the Sacramento Society for Medical Improvement; served during World War I; for many years physician for the Sacramento Orphanage; died in the Sutter Hospital September 3, aged 47, of chronic nephritis.

Ralph Edward Barnes, Greendale, Wis.; Keokuk (Iowa) Medical College, College of Physicians and Surgeons, 1908; member of the American Medical Association and the State Medical Association of Texas; formerly an executive of the Florida Public Health Association; past president of the Southern Tuberculosis Association and the Maryland Tuberculosis Association; had been affiliated with the Galveston County Health Unit in Texas; served during World War I; died August 21, aged 61, of carcinoma of the colon.

Bret Vernon Bates, Browns Valley, Minn.; University of Nebraska College of Medicine, Omaha, 1908; Drake University College of Medicine, Des Moines, 1909; member of the American Medical Association; awarded the Distinguished Service Cross for bravery during World War I; died in the Veterans Administration Facility, Minneapolis, August 6, aged 62.

William J. Beery, Detroit; Michigan College of Medicine and Surgery, Detroit, 1904; for many years on the staff of St. Joseph Mercy Hospital; died September 4, aged 69, of terminal pneumonia due to hypertensive cardiovascular disease.

James Cicero Bramblett, Chickasha, Okla.; Atlanta School of Medicine, 1908; died August 2, aged 67, of cerebral hemorrhage.

Victor Vernon Cameron, Marion, Ind.; Baltimore Medical College, 1899; died September 3, aged 69.

Clarence M. Cheadle, Burnsville, N. C.; Keokuk (Iowa) Medical College, 1898; served during World War I; died September 3, aged 76, of heart disease.

Hugh Tucker Chelf Jr., Culpeper, Va.; University of Virginia Department of Medicine, Charlottesville, 1935; interned at the Mercy Hospital in Cedar Rapids, Iowa; died September 10, aged 37, of coronary occlusion.

James Richard Condon, Spokane, Wash.; Creighton University School of Medicine, Omaha, 1923; member of the American Medical Association; team physician on the athletic staff at Gonzaga University; affiliated with the Sacred Heart Hospital; died September 8, aged 48, of coronary thrombosis.

John Francis Connole, Wilkes-Barre, Pa.; Jefferson Medical College of Philadelphia, 1906; member of the American Medical Association; died in the Mercy Hospital August 29, aged 62, of cirrhosis of the liver.

Fletcher Lovell Crocker ✠ Pontiac, Ill.; Miami Medical College, Cincinnati, 1891; on the staff of St. James Hospital, where he died August 31, aged 79, of coronary thrombosis.

Edward Anthony Dignam ✠ Rockville, Conn.; Medical College of Virginia, Richmond, 1928; interned at St. Francis Hospital in Hartford, where he was a member of the staff; served a residency at the New York Eye and Ear Infirmary and the Manhattan Eye, Ear and Throat Hospital in New York; on the staff of the Rockville City Hospital; died in Niantic August 26, aged 48, of coronary thrombosis.

Ralph Giddings Dryer, Tucson, Ariz.; University of Tennessee College of Medicine, Memphis, 1931; associated with Thomas-Davis Clinic; district physician and surgeon for the Southern Pacific Railroad; died August 30, aged 39, of coronary disease.

Thomas Eugene Dunnam, Houston, Texas; University of Texas School of Medicine, Galveston, 1912; member of the American Medical Association; served during World War I; died in the Memorial Hospital August 29, aged 60, of myocardial failure.

William Turner Eikner, Denver; Milwaukee Medical College, 1901; died August 24, aged 83, of coronary occlusion.

Irving A. Elson, Canton, Ohio; Western Reserve University Medical Department, Cleveland, 1891; member of the American Medical Association; died August 24, aged 81.

Walter J. Fahrner ✠ Joliet, Ill.; Northwestern University Medical School, Chicago, 1905; on the staff of St. Joseph's Hospital, where he died September 4, aged 63, of incarcerated and strangulated direct inguinal hernia and cystic degeneration of the kidneys.

Andrew Suydam Fritts, Binghamton, N. Y.; Columbia University College of Physicians and Surgeons, New York, 1897; past president of the Broome County Medical Society; on the staff of the Binghamton City Hospital; died August 8, aged 72, of arteriosclerotic heart disease.

Elias Gamrin, Brooklyn; Columbia University College of Physicians and Surgeons, New York, 1915; member of the American Medical Association; interned at the Montefiore Home and Hospital and the Beth Israel Hospital in New York; on the staff of the Jewish Hospital, where he died September 7, aged 55, of coronary thrombosis.

Leroy Thomas Geer, Syracuse, N. Y.; University of Pennsylvania Department of Medicine, Philadelphia, 1901; one of the founders and served on the staff of the Onondaga General Hospital; died September 1, aged 66, of coronary thrombosis.

Zina Leslie Gilding, Vicksburg, Mich.; University of Michigan Homeopathic Medical School, Ann Arbor, 1910; served on the board of educatior and as village health officer; formerly on the staffs of the Borgess and Bronson hospitals in Kalamazoo and the Franklin Memorial Hospital; died in Schoolcraft September 5, aged 73, of cerebral hemorrhage.

William Arvel Gott, Peoria, Ill.; Chicago Homeopathic Medical College, 1901; member of the American Medical Association; served in the medical corps of the U. S. Army during World War I; died September 18, aged 70, of coronary occlusion.

George Henry Greenwood, Fredericktown, Mo.; Beaumont Hospital Medical College, St. Louis, 1897; past president of the Madison County Medical Society; died in a hospital at Farmington August 29, aged 83, of cerebral hemorrhage.

Milton Jacob Haas ✠ Allentown, Pa.; University of Pennsylvania Department of Medicine, Philadelphia, 1907; member of the staffs of the Sacred Heart Hospital and the Allentown Hospital, where he died August 26, aged 71, of coronary artery disease.

Walter George Hallstead, Penn Yan, N. Y.; Cornell University Medical College, New York, 1911; served during World War I; health officer; on the staff of the Soldiers and Sailors Memorial Hospital, where he died September 19, aged 58, of cerebral hemorrhage.

Sandy Byars Harrell, Macon, Ga.; University of Nashville (Tenn.) Medical Department, 1888; died August 24, aged 77, of chronic myocarditis.

Daniel D. Hendrickson, Middletown, N. J.; University of Pennsylvania Department of Medicine, Philadelphia, 1880; past president of the Monmouth County Medical Society; served as school physician and insurance examiner; died August 17, aged 88, of carcinoma of the prostate, acute nephritis and endocarditis.

Harrison Sidney Hickok ✠ Kansas City, Mo.; Omaha Medical College, 1895; an Affiliate Fellow of the American Medical Association; on the staff of the Trinity Luthern Hospital; died in St. Mary's Hospital, Rochester, Minn., August 24, aged 76, of hemorrhage due to gastric ulcer.

Agnew Hodge Hilsman ✠ Albany, Ga.; Cornell University Medical College, New York, 1899; past president of the Chattahoochee Valley Medical and Surgical Association; member of the Southeastern Surgical Association; fellow of the American College of Surgeons; surgeon to the Phoebe Putney Memorial Hospital; died August 21, aged 69, of pulmonary emphysema.

Harry Wagner Howland, Gaines, Pa.; Baltimore Medical College, 1903; member of the American Medical Association; formerly medical director of Tioga County; for many years a member of the school board; served as surgeon for the Baltimore and Ohio Railroad; died August 2, aged 63, of coronary thrombosis.

Horace Gordon Huey ✠ Homerville, Ga.; Chicago College of Medicine and Surgery, 1915; served as chairman and member of the state board of medical examiners; formerly member of the county and local board of education; vice president of the Empire Banking Company; owner of a hospital bearing his name; died August 25, aged 54, of heart disease.

David Bunyan Jackson, Greer, S. C.; Southern Medical College, Atlanta, 1885; member of the American Medical Association; died August 7, aged 87.

A. Judson James, Houston, Texas; University of Texas School of Medicine, Galveston, 1899; honorary member of the State Medical Association of Texas; member of the American Medical Association; died August 25, aged 84, of cerebral hemorrhage.

William Leroy Kenney, St. Joseph, Mo.; State University of Iowa College of Medicine, Iowa City, 1897; member of the American Medical Association; honorary member of the Missouri State Medical Association; formerly professor of clinical ophthalmology at the Ensworth Medical College and on the faculty of the Central Medical College; served in France during World War I; on the staff of the Missouri Methodist Hospital, where he died August 11, aged 72, of cerebral hemorrhage.

Arthur Charles Kleutgen ✠ Chicago; Northwestern University Medical School, Chicago, 1902; formerly associate professor of medicine at Loyola University School of Medicine; on the staff of the Woodlawn Hospital, where he died September 13, aged 66, of coronary thrombosis and hypertension.

Edward Allen Knowlton ✠ Holyoke, Mass.; Tufts College Medical School, Boston, 1909; fellow of the American College of Surgeons; chairman of the state board of registration in medicine; senior visiting surgeon, Holyoke Hospital; visiting surgeon, Providence Hospital; consulting surgeon to the Belchertown State School, Belchertown; died August 22, aged 62, of cerebral hemorrhage.

Robert Antoine LeTourneau ✠ Chicago; Northwestern University Medical School, Chicago, 1895; an Affiliate Fellow of the American Medical Association and emeritus member of the Illinois State Medical Society; served on the city board of health and on the staffs of the Jackson Park, County and Chicago Baptist hospitals; died September 5, aged 83, of coronary thrombosis and hypertension.

Gustav Adolph Mack, Gallipolis, Ohio; Bellevue Hospital Medical College, New York, 1894; member of the American Medical Association and the Association of Military Surgeons of the United States; served during World War I; captain in the medical reserve corps of the U. S. Army, not on active duty; for several terms county coroner; surgeon for the New York Central Railroad for many years; died August 18, aged 76, of carcinoma of the pancreas.

Charles Marcellus Mashburn ✠ Atlanta, Ga.; Atlanta College of Physicians and Surgeons, 1912; specialist certified by the American Board of Pediatrics, Inc.; formerly associate in pediatrics at the Emory University School of Medicine; served during World War I; on the staffs of the Georgia Baptist and Piedmont hospitals; died in the Blackman Sanatorium August 14, aged 55, of chronic pyelitis.

Claude William Mason ✠ Omaha; University of Nebraska College of Medicine, Omaha, 1905; assistant professor of medicine at his alma mater; fellow of the American College of Surgeons; formerly a medical missionary in Siam and China; for many years a member of the board of education, of which he had been past president; on the staffs of the University of Nebraska Hospital, St. Catherine's Hospital and the Immanuel Deaconess Institute, where he died August 4, aged 65, of coronary infarction.

James Henry McCaffrey, Buffalo; Baltimore Medical College, 1898; died in the Sisters Hospital August 30, aged 75, of carcinoma.

Americus Ojeda McMichael, Denver; Drake University Medical Department, Des Moines, 1894; also a graduate in pharmacy; died in St. Luke's Hospital August 12, aged 81, of cerebral hemorrhage and cardiovascular renal disease.

Samuel Albert Miller ✠ Longview, Texas; University of Tennessee Medical Department, Nashville, 1894; died August 28, aged 78, of hypertension and nephritis.

Robert Booth Moore, Little Rock, Ark.; Columbia University College of Physicians and Surgeons, New York, 1914; specialist certified by the American Board of Otolaryngology; member of the American Academy of Ophthalmology and Otolaryngology; served overseas during World War I; one of the founders and on the staff of the Trinity Hospital; died in the Barnes Hospital, St. Louis, August 12, aged 57, of lymphosarcoma.

Mary Catherine Couch Mora, East Islip, N. Y.; Tufts College Medical School, Boston, 1912; served on the staff of the Central Islip State Hospital in Central Islip; died August 19, aged 55, of cerebral arteriosclerosis.

Lyman Sanderson Osborne, Fitzgerald, Ga.; University of Michigan Department of Medicine and Surgery, Ann Arbor, 1878; member of the American Medical Association; honorary member of the Medical Association of Georgia; member of the school board and served as city health officer; for many years physician for the Fitzgerald Cotton Mills; on the staff of the Fitzgerald Hospital; died August 6, aged 90, of senility.

Richard Frederic Lot Ridgway, Allentown, N. J.; Johns Hopkins University School of Medicine, Baltimore, 1906; member of the American Medical Association, American Psychiatric Association and the Medical Society of the State of Pennsylvania; past president of the Dauphin County (Pa.) Medical Society; served as chief physician at the Harrisburg (Pa.) State Hospital; died in the Hospital of the University of Pennsylvania, Philadelphia, August 15, aged 70, of bronchopneumonia and paralysis agitans.

William Roberts ✠ Major, U. S. Army, retired, Washington, D. C.; Georgetown University School of Medicine, Washington, 1894; died April 19, 1944, aged 79, of heart disease.

Louis Hymen Roddy ✠ Waco, Texas; University of Maryland School of Medicine, 1909; medical examiner for the Selective Service; on the staffs of the Providence Hospital and the Hillcrest Memorial Hospital, where he died August 20, aged 57, of coronary occlusion.

Jacob Rubin, Chicago; Loyola University School of Medicine, Chicago, 1921; member of the American Medical Association; died in the Presbyterian Hospital July 10, aged 55, of coronary disease and hypostatic pneumonia.

Eugene Farmer Sanford, Buchanan, Ga.; Hospital Medical College, Eclectic, Atlanta, 1910; University of Georgia Medical Department, Augusta, 1912; president of the Haralson County Medical Society; member of the American Medical Association; major in the medical corps of the U. S. Army during World War I; served as member of the governor's staff, mayor of Buchanan and member of the city council; died in the Harbin Hospital, Rome, July 26, aged 55, of arteriosclerotic heart disease.

Margaret McPhee Sanford, Boston; Boston University School of Medicine, 1898; died in Billerica August 31, aged 78, of acute myocarditis.

Harry B. Smith, Keo, Ark.; Memphis (Tenn.) Hospital Medical College, 1901; died in Little Rock August 13, aged 70, of chronic nephritis.

Dalton Harris Trepagnier, New Orleans; Medical Department of Tulane University of Louisiana, New Orleans, 1903; served during World War I and with the U. S. Veterans Bureau; died July 13, aged 66, of coronary thrombosis.

Roy J. Turner, New Baltimore, Mich.; Michigan College of Medicine and Surgery, Detroit, 1906; also a minister; member of the American Medical Association; died July 10, aged 65, of cardiac decompensation.

William Bowers Watts Jr., Claremont, Calif.; University of Georgia Medical Department, Augusta, 1915; member of the American Medical Association and the Arizona State Medical Association; fellow of the American College of Surgeons; served overseas during World War I; formerly chief surgeon at the Miami-Inspiration Hospital in Miami, Ariz.; died in the San Antonio Community Hospital, Upland, July 17, aged 52.

Benjamin B. Wechsler ✠ Pittsburgh; University of the South Medical Department, Sewanee, Tenn., 1900; died August 17, aged 66, of coronary thrombosis.

LIEUT. COL. ALBERT C. KRUKOWSKI*
M. C., A. U. S., 1907-1944

MAJOR CHARLES HENRY WILSON
M. C., A. U. S., 1889-1944

LIEUT. ROBERT JOHN PETTERS
M. C., A. U. S., 1920-1945

Samuel Schaeffer ✠ New York; Columbia University College of Physicians and Surgeons, New York, 1908; on the staffs of the French and Park West hospitals; died August 16, aged 58, of arteriosclerosis.

James W. Williams, Dallas, Texas; University of Louisville (Ky.) Medical Department, 1883; died August 19, aged 86.

Lewis Edward Zins, New York; Illinois Medical College, Chicago, 1898; died July 20, aged 71.

KILLED IN ACTION

Albert Charles Krukowski ✠ Lieutenant Colonel, M. C., U. S. Army, San Antonio, Texas; McGill University Faculty of Medicine, Montreal, Que., Canada, 1935; interned at the Station Hospital in Fort Sam Houston, San Antonio; U. S. Army Medical School in 1937; entered the medical corps of the U. S. Army on July 1, 1936; promoted to captain on July 1, 1939; after a tour of duty at Station Hospital, Fort Bragg, N. C., served at Corregidor, P. I.; en route from the Philippines in December of 1941 when the Japs attacked the Islands and Pearl Harbor; his ship made port safely in Honolulu on Dec. 17, 1941 whereupon he was immediately assigned to emergency temporary duty at one of the provisional general hospitals there; returned to the United States on June 1, 1942; promoted to major on July 7, 1942; served as executive officer of Percy Jones General Hospital at Battle Creek, Mich., until Oct. 6, 1943, when he was transferred to Camp Swift, Texas, taking command of the 110th Evacuation Hospital; promoted to lieutenant colonel on June 2, 1943; after an intensive training period the unit went overseas, where it supported the Third U. S. Army in severe combat; died near Bastogne, Belgium, Nov. 7, 1944, aged 37.

Charles Henry Wilson, New York; Tufts College Medical School, Boston, 1913; served eighteen months overseas during World War I and was discharged as a captain; began active duty as a major in the medical corps, Army of the United States, on March 10, 1941; sent to Manila, where he was stationed at the Sternberg General Hospital; after the fall of the Philippines, went through the ordeal of Bataan and Corregidor and became a war prisoner; killed during an air attack in the Pacific area Dec. 15, 1944, aged 55, while being transported aboard a Japanese vessel from the Philippine Islands to Japan.

Robert John Petters, Kenmore, N. Y.; University of Minnesota Medical School, Minneapolis, 1944; interned at the Buffalo General Hospital in Buffalo; began active duty as a first lieutenant in the medical corps, Army of the United States, on Oct. 6, 1944; killed in action in Okinawa, April 19, aged 25.

Correspondence

THE GERMAN UNIVERSITY MEDICAL SCHOOLS DURING THE OCCUPATION

To the Editor:—At the invitation of Major Gen. Morrison C. Stayer, chief of the Public Health and Welfare Division of the U. S. Group Control Council (Germany), I visited during August and September all of the universities in the United States zone of occupation and the majority of those in the other three zones with Major H. M. Rozendaal, Capt. J. S. Lichty and Dr. E. Y. Hartshorne, who are assisting General Stayer in the resumption of German medical education. Their excellent observations as well as the results of several visits to Germany are incorporated in this report.

The German medical schools, which were good in 1912, have not kept pace with the advances in medicine. Except for an occasional specialist who has become famous, the German graduates, even those who took postgraduate work as assistants, are not equal to the average American senior medical student. The reasons are lectures without adequate laboratory and clinical work, too many students with little or no selection, inadequate facilities and faculties which are too small, the members of which do not know modern non-German medicine, whose salaries depend on the number of their students so that they are tempted to encourage an increased enrolment, who also examine their own students and thus may lower standards, and who have too much private practice. Furthermore, the separation of research workers from the medical schools into Kaiser Wilhelm institutes has reduced the productiveness of German medicine so that the medical journals for a generation have been of little scientific value. Unfortunately, most of the Germans do not realize that improvement, reorganization, limitation and supervision of medical education are necessary. As a result, although accurate figures are not available, German physicians, in addition to being poorly trained, are too numerous. The early opening of the medical schools is unnecessary to supply more physicians, but it is desirable in order to maintain continuity of medical education. The German medical schools should be a warning to us not to let our pride in American medical education reach the point at which we are completely satisfied and are unwilling to try to improve it.

Of the seven schools in the United States zone only three have intact physical facilities (Marburg, Heidelberg and Erlangen), but the other four (Giessen, Frankfort, Munich and Würzburg) have improvised usable accommodations for the hospital care of patients in their communities; their facilities for teaching, however, are inadequate.

The three following programs for the opening of the medical schools have been suggested:

1. Limited denazification without reform: Reopening as they now stand with denazification limited to the removal from the faculties of only those individuals arrested under the orders of the military government or removed by action of the present faculty or its planning committees. This is the plan desired by the Germans themselves. It would permit some individuals, who would ordinarily be removed under existing directives, to continue in their present positions, but it is contrary to the aims of the military government.

2. Complete denazification and reform with active American participation: Complete denazification of the university; rigid selection of students; reorganization of the curriculum to introduce laboratory and bedside teaching in place of the present lecture system; establishment of a uniform, short, practical, final examination to replace the time-consuming staatsexamen; the payment of adequate teaching salaries with the university retaining all student fees; provision of supplements to German libraries and laboratories from American sources, and sponsorship of each opened German medical school in the United States zone by some American medical school, which probably, if invited, would rotate some of its faculty members to the German school so that modern teaching methods could be established and maintained. Although the installation and continuance of this program would benefit both the German and American medical schools, it is not practical because of the uncertainty of essential German cooperation and the possible adverse reaction from American and Allied sources.

3. Complete denazification without reform: The denazification of the medical faculties without reorganization of the curriculum, except for the elimination of Nazi ideology and of dangerous research activities.

The third program is the most practical one and is in accord with the aims of the military government, making the Germans work out their own problems after having been completely denazified. Complete denazification automatically removes over 50 per cent of the members of faculties and staffs from the schools, and the result raises the serious problems of adequate personnel and the maintenance of the standards of medical education. Traditionally, the size of the faculty of medicine of each university has been small, numbering from fifty to sixty individuals, some of whom are only nominal. The clinic assistants, who are in addition to the faculty, have no part in the instruction of students even though they are full time employees of the university. Denazification will leave each medical school with several departments in which no individual of the former faculty remains, and the majority of the assistants also are slated for removal from their present positions. Heidelberg and Marburg have been able to conduct postgraduate courses with a denazified teaching staff because a complete curriculum is not required. However, politically acceptable replacements probably can be obtained from the United States zone so that Heidelberg, Marburg and Erlangen should be able to open on November 1 with regular medical semesters.

Major Gen. Morrison C. Stayer, Brig. Gen. James Stevens Simmons and Col. Thomas B. Turner made this survey possible.

WILBURT C. DAVISON, M.D.,
Duke University,
Durham, N. C.

CHEMICAL COMPOUNDS WITH INHIBITORY EFFECT IN HYPERTHYROIDISM

To the Editor:—Occasionally, discoveries are made in apparently unrelated fields in medicine which under closer examinations can be brought under a common denominator.

While a chief resident at the Montefiore hospital, New York, I was investigating a possible influence of thiouracil on cancer of the thyroid gland. The results, however, were inconclusive. But while examining goitrogenic substances it occurred to me that potassium thiocyanate, known to produce goiter, has a chemical formula similar to thiourea. By substituting the K— by NH_4—, ammonium thiocyanate, NH_4CNS, is obtained. This chemical compound can be converted into thiourea:

$$NH_4CNS \leftrightharpoons CS(NH_2)_2$$

This formula evidently explains the goitrogenic property of potassium thiocyanate.

Other goitrogenic substances include the sulfonamides. It is assumed, almost with certainty, that the bacteriostatic effect of the sulfonamides is due to a substitution of metabolites essential to the growth of the bacteria by substances which differ only slightly. The latter will be taken up by the bacterial organism, but it cannot be metabolized any further, thus bringing bacterial growth to a standstill. Because of their chemical similarity the sulfonamides compete with para-aminobenzoic acid, an essential metabolite (Woods, D. D.: *Brit. J.*

Exper. Path. **21**:74 [April] 1940. McIlwain, Henry, and Hawking, Frank: *Lancet* **1**:449 [April 10] 1943). A similar process may take place when thiourea is offered to the thyroid gland. Somewhere in the synthesis of thyroxin thiourea substitutes an essential metabolite similar to thiourea in its construction. This unnatural metabolite will be synthesized into a biologic artefact devoid of hormonal function. Therefore the symptoms due to thyroxin will disappear. Unfortunately both thiourea and thiouracil have toxic side effects such as agranulocytosis. The presence of an artificial metabolite in the production of the white blood corpuscles may be the causative factor behind this complication. In my unpublished paper, which was sent to the Lederle Company, Pearl River, N. Y., I suggested that other substances could be used to suppress the activity of an overfunctioning thyroid gland. Compounds of thiourea with side branches similar to sulfathiazole or sulfadiazine or compounds able to replace other metabolites essential to the synthesis are an example.

It may be just speculation, but potassium thiocyanate may block the utilization of an essential metabolite in the synthesis of a vasopressor substance. Here too derivatives of thiocyanates may enhance the vasodepressing effect. Since I am in the Army, investigations along this line are impossible for me to carry out. Therefore I make these suggestions to stimulate further experiments in this field.

A. D. Jonas, Lieutenant, M. C., A. U. S.

TREATMENT OF THE AGONAL STATE AND OF CLINICAL DEATH

To the Editor:—Study of the physiology and therapy of the agonal state in animal experiments and of these problems in man led me to the conclusion that arteriovenous transfusion of blood with epinephrine and glucose added to it, combined with vigorous artificial respiration, are the most important factors in the process of resuscitation. Today we may consider it established that death of the organism does not always take place as a sudden cessation of life. Biologic or irrevocable death is usually preceded by what is termed clinical death diagnosed because of cessation of cardiac and respiratory activity. During this period of clinical death, which does not last more than five or six minutes, the tissues and organs have not had sufficient time to undergo irreversible changes. Clinical death, therefore, is merely a qualitative expression of the process of dying. In a number of cases the transition from life to death can be arrested during this period. Whatever the cause of the agonal state or of clinical death, waning of respiratory function and of circulation of the blood are the major morbid processes which, if allowed to continue, will lead to the death of the organism. The process of dying taking place in the agonal state or in the state of clinical death can be arrested and death averted by reversing these two cardinal functions. I felt that data which I had obtained in animal experiments were applicable to the treatment of wounded soldiers dying from their injuries. Accordingly, I went to the front to work in the field dressing stations.

The major efforts in the method were aimed at the restoration of the cardiovascular function by means of arteriovenous transfusion and of vigorous artificial respiration by means of a bellows. To the blood, which was heated up to 37 C., was added 1 to 2 cc. of 4:1,000 solution of epinephrine hydrochloride and 50 to 100 cc. of 40 per cent solution of glucose. The needle was introduced into the brachial artery and the blood was infused in the centripetal direction, i. e. toward the heart, under a pressure of 180 to 200 mm. of mercury. As soon as a strong contraction of the heart was obtained, blood was infused by way of the brachial vein under pressure of 40 to 60 mm. of mercury. Usually transfusion of 200 to 300 cc. of blood into the artery sufficed to produce the necessary effect, i. e. restoration of the coronary circulation. The amount of blood introduced into the vein depended on the condition of the patient and varied from 500 to 1,200 cc. Artificial respiration was carried out with the aid of a bellows of the capacity of 0.5 to 2 liters. In the beginning artificial respiration was continued at a rate of 25 to 30 respirations per minute, and later it was reduced to 16 to 20 per minute. The amount of air introduced with each respiration was shown on the scale of the bellows as 1,000 to 1,500 cc. Artificial respiration was continued for some time after the appearance of normal breathing, although the rate was reduced and it was applied with intervals of rest.

The major indication for this therapy is primarily sudden death from such causes as excessive loss of blood, suffocation, agonal state and clinical death in patients suffering from severe injuries to limbs, collapse and the like. I treated, in the course of four months, 51 cases of shock, agonal and preagonal states and clinical death. There were 17 cases of severe shock, 20 cases of agonal state, 10 cases of clinical death and 4 cases of suffocation. In 34 of the 51 cases the treatment preceded proposed surgical intervention, and 31 of these patients were able to undergo such treatment.

The final results are as follows: In 12 of the 51 cases, treatment resulted in permanent effects in men who were regarded as hopeless and who were already in the agonal state or in the state of clinical death. They were evacuated after resuscitation to base hospitals. In 37 other cases the effect was not permanent and the wounded men died later as a result of the grave nature of their injuries. Among patients treated in the state of clinical death, 5 have recovered completely all of their functions—the dead were brought back to life. With 1 exception I did not find any disturbance of the central nervous system in the resuscitated men.

In view of these results, I consider it the task of the doctor to give active treatment to patients in the agonal state and in the state of clinical death. One should not abandon one's efforts at resuscitation even after the cessation of cardiac and respiratory action, especially in cases of sudden death. From this moment on the struggle is difficult but is not hopeless. A heart that has stopped beating can be made to resume its action in a number of cases. Respiration may also be restored, although this is even more difficult. Restoration of the functions of the whole organism follows.

V. Negovsky, M.D., Moscow, U. S. S. R.

Medical Examinations and Licensure

COMING EXAMINATIONS AND MEETINGS

BOARDS OF MEDICAL EXAMINERS
BOARDS OF EXAMINERS IN THE BASIC SCIENCES

Examinations of the boards of medical examiners and boards of examiners in the basic sciences were published in The Journal, Dec. 15, page 1125.

NATIONAL BOARD OF MEDICAL EXAMINERS

National Board of Medical Examiners: Parts I and II. Various Centers, Feb. 4-6. Part III. Various Centers, March. Exec. Sec., Mr. E. S. Elwood, 225 S. Fifteenth St., Philadelphia 2.

EXAMINING BOARDS IN SPECIALTIES

American Board of Dermatology & Syphilology: *Written. Group B.* April 22. *Oral. Group A and B.* June 6-8. Final date for filing application is March 1. Sec., Dr. George M. Lewis, 66 E. 66th St., New York 21.

American Board of Neurological Surgery: *Oral.* Chicago, May 27. Final date for filing application is Feb. 1. Sec., Dr. P. C. Bucy, 912 S. Wood St., Chicago 12.

American Board of Ophthalmology: Chicago, Jan. 18-22 and New York, April 10-13, San Francisco, June 22-25, and Chicago, Oct. 9-12. Sec., Dr. S. Judd Beach, 56 Ivie Rd., Cape Cottage, Me.

American Board of Otolaryngology: Spring 1946. Sec., Dr. Dean M. Lierle, University Hospital, Iowa City, Ia.

American Board of Psychiatry & Neurology: Chicago, May 24-25. Final date for filing application is February 1946. Sec., Dr. Walter Freeman, 1028 Connecticut Ave., N. W., Washington 6, D. C.

American Board of Urology: *Oral.* Chicago, February 1946. Sec., Dr. Gilbert J. Thomas, 1409 Willow St., Minneapolis 4.

Current Medical Literature

AMERICAN

The Association library lends periodicals to members of the Association and to individual subscribers in continental United States and Canada for a period of three days. Three journals may be borrowed at a time. Periodicals are available from 1935 to date. Requests for issues of earlier date cannot be filled. Requests should be accompanied by stamps to cover postage (6 cents if one and 18 cents if three periodicals are requested). Periodicals published by the American Medical Association are not available for lending but can be supplied on purchase order. Reprints as a rule are the property of authors and can be obtained for permanent possession only from them.

Titles marked with an asterisk (*) are abstracted below.

American Journal of Pathology, Ann Arbor, Mich.

21:821-1030 (Sept.) 1945

Experimental Studies in Calcification: I. Effect of Rachitogenic Diet on Dental Tissues of White Rat. J. P. Weinmann and I. Schour.—p. 821.
Id.: II. Effect of Rachitogenic Diet on Alveolar Bone of White Rat. J. P. Weinmann and I. Schour.—p. 833.
Id. III. Effect of Parathyroid Hormone on Alveolar Bone and Teeth of Normal and Rachitic Rat. J. P. Weinmann and I. Schour.—p. 857.
Study of Circulation of Spleen in Sicklemia and Sickle Cell Anemia. W. J. Tomlinson.—p. 877.
Microscopic Diagnosis of Pulmonary Emphysema. W. S. Hartroft.—p. 889.
Visceral Lesions in Measles, with Report of Koplik Spots in Colon. Elizabeth U. Corbett.—p. 905.
*Extragenital Choriocarcinoma in Male. T. C. Laipply and R. A. Shipley.—p. 921.
Studies on Ameboid Motion and Secretion of Motor End Plates: VI. Pathologic Effects of Traumatic Shock on Motor and Sensory Nerve Endings in Skeletal Muscle of Unanesthetized Rats in Noble-Collip Drum. E. J. Carey, L. C. Massopust, W. Zeit, E. Haushalter, J. Hamel and R. Jeub.—p. 935.
Cellular Reactions to Mycolic Acids. B. Gerstl, R. Tennant and O. Pelzman.—p. 1007.
Experimental Studies in Cardiovascular Pathology: XI. Thesaurosis and Atheromatosis Produced in Dogs by Repeated Intravenous Injection of Solutions of Sodium Cellulose Glycollate. W. C. Hueper.—p. 1021.

Extragenital Choriocarcinoma in Male.—Laipply and Shipley state that if strict criteria are maintained and if negative serial block sections of the testes are considered essential, only 7 cases of extragenital choriocarcinoma in the male recorded in the literature furnish conclusive proof of an extragenital origin. To these Laipply and Shipley add their own case, making a total of 8 unquestionably proved cases of primary extragenital choriocarcinoma in the male. They report that a complex teratoma originating in the thorax of a boy aged 13 years was removed surgically. He died seven years later of either a recurrence or an independent teratoma with choriocarcinoma in the tumor and widespread choriocarcinomatous metastases. Gynecomastia, testicular atrophy and hyperplasia of the interstitial cells of Leydig were associated with the tumor. Endocrine alterations resembled those of pregnancy.

Anesthesiology, New York

6:449-560 (Sept.) 1945

Hazard of Anoxia During Nitrous Oxide Anesthesia. A. L. Barach and E. A. Rovenstine.—p. 449.
*Clinical Studies on Morphine: I. Immediate Effect of Morphine Administered Intravenously and Intramuscularly on Respiration of Normal Man. R. D. Dripps and J. H. Comroe Jr.—p. 462.
Spinal Analgesia with Solutions of Procaine and Epinephrine: Preliminary Report of 108 Cases. M. D. Prickett, E. G. Gross and S. C. Cullen.—p. 469.
Intubation Without Laryngoscopy. F. Hudon.—p. 476.
*Influence of Liver and Kidney on Duration of Anesthesia Produced by Barbiturates. G. M. C. Masson and Eleanor Beland.—p. 483.
Endotracheal Anesthesia in Combat Zone. F. W. Bowers.—p. 492.
Effect of Variations of Intratracheal Pressure and Anesthetic Mixtures on Arterial Blood Oxygen (Experimental Study). T. F. Thornton, R. C. Martin, H. M. Livingstone and W. E. Adams.—p. 498.
Roentgenologic Study of Male Sacrum as Aid in Caudal Analgesia. P. A. Robin and V. J. Collins.—p. 505.
Ether Allergy: Case Report. H. B. Stein.—p. 515.
Hemiplegia Following Ether Anesthesia. J. E. Pisetsky.—p. 522.

Immediate Effect of Morphine on Respiration.—Dripps and Comroe administered morphine sulfate intravenously to 26 persons (3 female, 23 male) whose ages ranged from 19 to 88 years and whose weights ranged from 42.2 to 87.4 Kg. Six persons over the age of 70 received 10 mg. (⅙ grain); the others received 15 mg. (¼ grain). Twenty-three persons (7 female and 16 male) received morphine intramuscularly; their ages varied from 20 to 88 years and their weights from 47.7 to 99.5 Kg. Eleven of these were given 20 mg. (⅓ grain), 2 received 15 mg. (¼ grain), 1 received 12 mg. (⅕ grain) and 9 received 10 mg. (⅙ grain). Intravenous injection of morphine produced maximal depressant effects within three to seven minutes in the majority of instances. Respiratory minute volume, rate and tidal exchange were diminished. The maximal respiratory depression following morphine is approximately the same whether the morphine is administered intravenously or intramuscularly. Morphine given intravenously appears to be safer because the full degree of respiratory depression becomes apparent within three to seven minutes. Following intramuscular or subcutaneous injection of morphine, the depression may gradually deepen over a period of thirty to ninety or more minutes. If the patient given intravenous morphine is watched carefully over a ten minute period after injection, the maximal depression will usually be noted. When morphine is injected intravenously as preoperative medication before general anesthesia, induction of general anesthesia should be delayed ten minutes after the injection until the maximal depression has been noted. If this precaution is observed, the intravenous route is a useful one prior to general anesthesia, since it enables the anesthetist to avoid the annoying combination of increasing respiratory depression from morphine and the anesthetic agent.

Liver and Kidney in Anesthesia Produced by Barbiturates.—Masson and Beland used partially hepatectomized or completely nephrectomized animals to determine the relationship between the duration of action of barbiturates and the site of their detoxification. Twenty-nine compounds were investigated in experiments on rats. For each compound the degree of detoxification (inactivation or elimination) in the liver or the kidney was represented by an "index of detoxification," or the ratio of the average duration of anesthesia of control animals to the average duration of anesthesia of experimental animals. The authors suggest that the barbiturates be classified in four groups according to the site of their detoxification. They include in group 1 those detoxified mainly in the kidney: barbital and phenobarbital. Group 2 includes those detoxified mainly in the liver: ipral, amytal, pentobarbital sodium, ortal, alurate, nostal, seconal, allyl pental, evipal, thioethamyl. Those detoxified approximately equally in the liver and kidney—neonal, delvinal, phanodorn and dial—are placed in group 3. Group 4 includes those possibly detoxified in all the tissues of the body but not to any great extent in the liver or kidney; that is, pentothal, propyl 1-methylallyl and allyl 1-methylallyl thiobarbiturates.

Archives of Dermatology and Syphilology, Chicago

52:75-146 (Aug.) 1945

Cutaneous Diseases in South Pacific: Observations Among Military Forces. W. W. Duemling.—p. 75.
*Vincent's Disease of Skin. A. Strickler.—p. 87.
Lupus Erythematosus: Treatment with Oxophenarsine Hydrochloride. L. C. Goldberg.—p. 89.
Erythema Multiforme: Report of Case of Severe Erythema Multiforme with Involvement of Mucous Membranes Treated with Penicillin. H. C. Robinson.—p. 91.
Allergic Reactions During Administration of Penicillin. J. H. Lamb.—p. 93.
Penetration of Surface Tissues with Copper by Iontophoresis: Penetration with Organic and Inorganic Copper Salts and Use of Detergents in Iontophoresis.—p. 96.
White Cross Striae of Finger Nails Following Cardiac Infarction. E. Urbach.—p. 106.
Classification of Tuberculosis of Skin. H. E. Michelson and C. W. Laymon.—p. 108.
Extragenital Syphilitic Infection in Negroes. H. H. Hazen.—p. 114.

Vincent's Disease of Skin.—A man aged 23 complained that his feet had been painful for the past two months. Walking was difficult, and the feet stung whenever anything touched them. There was a pronounced fetid odor from the feet, swelling of the paronychial tissue, purulent discharge and loosening of nails from the nail bed. On the left foot between the second and third interspaces there was an ulcer. The remaining interspaces showed crusting and desquamation. The lips were dry and showed slight fissuring. There was an ulceration at the commissures. The gums were swollen, painful and reddened; the tongue presented fissuring, with areas of denudation. The tonsillar and the pharyngeal mucosa was reddened and con-

gested. Examination revealed a large number of Vincent's spirilla and fusiform spirilla in the gums and a moderate number of the Vincent symbiotic organisms in the tonsillar and pharyngeal areas. In smears from the ulceration at the commissures of the mouth and in the lesion of the interspaces of the toes (ulcer) a moderate number of Vincent's spirilla and fusiform bacilli were found. The local treatment as described by Strickler consisted in application of sodium perborate to the feet and 10 per cent neoarsphenamine in glycerin to the gums. The patient remained in the hospital for thirty-six days and was discharged with the feet free from lesions.

Arkansas Medical Society Journal, Fort Smith

42:69-88 (Sept.) 1945

American Medicine Tomorrow. M. F. Cahal.—p. 69.
Modern Concepts of Cardiovascular Disease. C. T. Chamberlain.—p. 76.

42:89-105 (Oct.) 1945

War Neuroses Among Returning Soldiers. A. C. Kolb.—p. 89.

Bull. of the U. S. Army Med. Dept., Washington, D. C.

4:369-490 (Oct.) 1945

Clinical Observations on Early Trench Foot. C. A. Ragan and A. E. Schecter.—p. 434.
Is Gas Gangrene a Misnomer? J. F. Krumm.—p. 440.
Early Treatment of Combined Bone and Nerve Lesions. R. G. Spurling. —p. 444.
Insulin for Rehabilitation. H. M. Fox.—p. 447.
Second Year End Result of Arthrotomies of Knee. L. J. Willien.—p. 452.
Persistent Hepatitis in Patients Returning from Overseas. A. P. Fishman.—p. 457.
Myocardial Complications of Cutaneous Diphtheria. C. F. Kay and C. S. Livingood.—p. 462.
Caterpillar Dermatitis. S. Berkowitz.—p. 464.

California and Western Medicine, San Francisco

63:107-154 (Sept.) 1945

Recent Observations on Virus Pneumonia. M. D. Eaton.—p. 113.
Current Concepts in Varicose Vein Therapy. N. A. Sapiro.—p. 116.
Rheumatic Fever: Its Recognition. G. C. Griffith.—p. 119.
Rheumatic Fever Case Finding Program in Two California Counties. Helen M. Johnson.—p. 123.
Quinidine: In Treatment of Heart Disease. S. A. Weisman.—p. 125.
Short Wave Radiations: Mechanism of Anti-Inflammatory Effect. L. G. Jacobs.—p. 127.
What Can be Done for the Deafened Today? H. P. House.—p. 130.

Canadian Journal of Public Health, Toronto

36:341-384 (Sept.) 1945

*Diphtheria Among Schick Negative Persons in Halifax, Nova Scotia. R. J. Gibbons.—p. 341.
School Medical Services. T. C. Harold and J. M. Hershey.—p. 349.
Sources of Error in Dietary Surveys. E. W. McHenry, Helen P. Ferguson and J. Gurland.—p. 355.
Cases of Exposure to Methyl Bromide Vapors. F. J. Tourangeau and S. R. Plamondon.—p. 362.
Mortality Reductions in Ontario, 1900-1942: III. Age Groups of 50 and Over. N. E. McKinnon.—p. 368.

Diphtheria Among Schick Negative Persons.—Gibbons reviews 1,028 cases of diphtheria admitted to the Infectious Diseases Hospital in Halifax, Nova Scotia. There were 44 deaths. Death occurred in a child who had shown a primary Schick negative test two years and five months previously and in another child who had received three doses of fluid toxoid six months previously. Twenty-one per cent of the cases of diphtheria occurred in persons who had shown a primary negative Schick test or who had had three doses of toxoid within the previous three years. When the incidence rates in two groups, Schick negative (natural or induced by toxoid) and others, are calculated, it is found that the rate in the Schick negative group is approximately one tenth of the rate in the unprotected population.

Delaware State Medical Journal, Wilmington

17:171-186 (Sept.) 1945

Oral Penicillin: Review of Literature and Preliminary Report. J. W. Howard and E. G. Scott.—p. 171.
Psychogenetic Disturbances of Hearing and Vision. L. S. London. —p. 174.
Myelitis Complicating Varicella. A. H. Williams.—p. 178.

Journal of Clin. Endocrinology, Springfield, Ill.

5:291-326 (Sept.) 1945

Analysis of Human Urines for Steroid Substances. G. Pincus.—p. 291.
Estrogen Treatment of Stricture of Rectum Due to Lymphogranuloma Venereum. A. D. Seley, S. Vernick and H. Goldman.—p. 301.
Treatment of Angina Pectoris with Testosterone Propionate. S. Waldman.—p. 305.

Journal of Neurosurgery, Springfield, Ill.

2:365-462 (Sept.) 1945

Penetrating Brain Wounds: Analysis of 342 Cases. W. G. Haynes. —p. 365.
Reduction of Hernia Cerebri by Tantalum Cranioplasty: Preliminary Report. F. A. Carmichael Jr.—p. 379.
Tight Dural Closure with Pedicled Graft in Wounds of Brain. A. D. Ecker.—p. 384.
*Observations on Infection in Penetrating Wounds of Head. S. N. Rowe and O. A. Turner.—p. 391.
*New Uses of Tantalum in Nerve Suture, Control of Neuroma Formation, and Prevention of Regeneration After Thoracic Sympathectomy; Illustration of Technical Procedures. J. C. White and H. Hamlin.—p. 402.
Hemostasis in Neurosurgery. R. U. Light.—p. 414.
Surgical Investigation of New Absorbable Sponge Derived from Gelatin for Use in Hemostasis. R. U. Light and Hazel R. Prentice.—p. 435.

Infection in Penetrating Wounds of Head.—Rowe and Turner present observations on a large series of battle casualties seen in a neurosurgical center. Approximately 15 per cent of the head wounds showed infection. In most instances of infection the wound must be widely reopened to prevent the development of pockets of pus and extension of the infection to deeper structures. Penicillin has been effectively employed locally in solution (10,000 units per cubic centimeter of isotonic solution of sodium chloride) through a Dakin tube laid in the wound and carried out through the dressing. This method permits the frequent instillation of the drug (usually 10,000 units every three hours). It has the further advantages of permitting aspiration of pus from the wound before each instillation. The tube should not remain in place for more than one week. Dry penicillin mixed with sulfanilamide crystals (5 to 10,000 units of penicillin to each gram of sulfanilamide) has been dusted into the wound as an alternative method of local application. Meningitis is one of the most serious complications of penetrating wounds of the head. It has occurred in this series in approximately 4.5 per cent of the cases. The clinical picture produced by early meningitis following a penetrating wound of the head is not always clearcut. Sometimes there is relatively little febrile reaction and the patient may not appear acutely ill. It is of primary importance to eliminate the source of the infection. Wide opening of an infected wound, removal of a necrotic cerebral fungus and repair of a cerebrospinal fluid leak constitute active therapy directed at the seat of the infection. Second in importance is the maintenance of adequate chemotherapy. The effectiveness of the treatment of meningitis depends to a great extent on the causative organism. If it is penicillin resistant the prognosis becomes much worse. Mixed infections that included organisms of the colon group produced the most dangerous meningeal infections. A striking percentage of brain abscesses have been clinically silent, many reaching considerable size with little evidence of increased intracranial pressure. Complete evacuation of the abscess in combination with local and systemic chemotherapy has proved effective in most cases.

Tantalum in Nerve Suture.—White and Hamlin point out that tantalum has the advantages of easy processing into plates, thin sheets or wire at the factory and of convenient sterilization, drilling, shaping or cutting in the operating room. It is ideal for nerve suture, as it can be drawn to extreme thinness (0.003 inch), ties with ease and can also be subsequently visualized in the x-ray as a marker of the position of the divided nerve ends. In sheets 0.001 inch thick it can be cut and rolled to fit the end of a nerve stump from which a painful neuroma has been removed. By crushing the distal open end a snugly fitting cap is formed which effectively prevents reformation of the neuroma. The same procedure is recommended for sealing off the cephalic stump of the divided thoracic ganglionated chain in preganglionic sympathetic denervation of the upper extremtiy. Annealed rolls of sheet tantalum (0.00075 inch) constitute a distinct improvement over the former use of foil in the protection of nerve anastomoses. Unlike the finer foil, these sheets show no tendency to crumple, and their use is of value under special circumstances which are often encountered in wartime injuries.

Public Health Reports, Washington, D. C.

60:1069-1100 (Sept. 14) 1945

Physical Impairments of Members of Low Income Farm Families—11,490 Persons in 2,477 Farm Security Administration Borrower Families, 1940: V. Defects of Nasal Septum; and Chronic Respiratory Affections, Exclusive of Diseased Tonsils. Mary Gover and J. B. Yaukey.—p. 1069.
*Effect of Topically Applied Sodium Fluoride on Dental Caries Experience: II. Report of Findings for Second Study Year. J. W. Knutson and W. D. Armstrong.—p. 1085.

60:1101-1128 (Sept. 21) 1945

Studies on Pharmacologic Action and Pathology of Alphanaphthylthiourea (ANTU): I. Pharmacology. W. T. McClosky and M. I. Smith.—p. 1101.
Note on Physician Time per Patient in Private Practice. B. M. Davis.—p. 1113.

Sodium Fluoride and Dental Caries.—Knutson and Armstrong present data on the incidence of dental caries in the permanent teeth of a treated group of children and a control group of children for the second year of a longitudinal study. The ages of the children at the time the study was begun varied from 7 to 15 years. The treated group, originally consisting of 337 children, received topical fluoride applications to the teeth in the left quadrants of the mouth. The teeth in the right or untreated mouth quadrants served as direct controls. An additional group of children, originally consisting of 392 children enrolled in the same schools as the treated children, did not receive fluoride treatments and served as additional controls. During an eight week period each child in the study groups received dental prophylaxis and a detailed dental examination. In addition the children in the treated group received from seven to fifteen topical applications of fluoride to the teeth in the left quadrants of the mouth. The fluoride treatment procedure consisted in isolation of the teeth with cotton rolls, drying the teeth with compressed air and wetting the crown surfaces of the teeth with 2 per cent sodium fluoride solution. The applied solution was allowed to dry in air for approximately four minutes. Analysis of the results for the two year period ended in May 1944 indicates that during both these time periods the initial caries attack on fluoride treated teeth continued to be approximately 40 per cent less than on untreated teeth. Furthermore, not only did the number of additional tooth surfaces attacked in previously decayed teeth continue to be less in treated than in untreated carious teeth, but the magnitude of the difference was appreciably increased during the second year.

Radiology, Syracuse, N. Y.

45:213-318 (Sept.) 1945

Radiation Necrosis of Calvarium: Report of 5 Cases. J. D. Camp and R. D. Moreton.—p. 213.
*Arachnodactyly. A. S. Parker and H. F. Hare.—p. 220.
Degenerative Effects of Large Doses of Roentgen Rays on Human Brain. T. J. Wachowski and H. Chenault.—p. 227.
*Roentgen Therapy of Primary Neoplasms of Brain and Brain Stem: Preliminary Report for Four Year Period Jan. 1, 1939-Dec. 31, 1943, with Follow-Up as of Sept. 1, 1944. C. B. Peirce, W. V. Cone, A. E. Elvidge and J. G. Tye.—p. 247.
Neurosurgical Procedures for Relief of Pain in Advanced Cancer. W. G. Crutchfield.—p. 253.
Roentgen Appearance of Lobar and Segmental Collapse of Lung. V. Collapse of Right Middle Lobe. L. L. Robbins and C. H. Hale.—p. 260.
Intestinal Obstruction: Further Experiences in Use of Flat Abdominal Films. N. S. Zeitlin and M. S. Mazel.—p. 267.
Radiology of Chest: Its Evaluation in Prevention of Tuberculosis. J. F. Brailsford.—p. 278.
Vertebra Plana (Calvé): Report of Case. A. F. Massaro.—p. 284.
Metallic Foreign Bodies in Gallbladder: Case Report. M. S. Donovan.—p. 292.

Arachnodactyly.—During the past year Parker and Hare have seen 4 patients with arachnodactyly. Three were members of the same family, a father and 2 daughters. The diagnosis of arachnodactyly can be established by a survey of the patient provided the physician is conscious of the essential features of this syndrome. The patient is tall and appears awkward, with excessively long arms and legs, long, thin, spider-like hands, meager subcutaneous fat, underdeveloped atonic musculature and often ectopia lentis. The emaciation accentuates the bony landmarks, and these in turn serve to emphasize the disproportionate length of the extremities as compared to the trunk. The delicately elongated, spider-like fingers give this syndrome its name. The feet and toes are likewise long and slender. Deformities of the joints are common. Pes planus, contractures, hammer toes, webbing and sometimes abnormally mobile patellas occur. The frequently associated scoliosis, kyphosis, winged scapula and deformities of the sternum are considered to be the result of the laxity of the ligaments and atonic musculature. The skull of the arachnodactylic patient tends to be dolichocephalic with prominent supraorbital ridges, frontal bossing, a pointed chin and either a prominent or a broad, somewhat flattened nose. The face is usually drawn, wrinkled and old looking, often with a melancholy expression. The ears are frequently enlarged. Approximately 50 per cent of the patients have a partial dislocation of the lens, usually upward. Congenital heart anomalies frequently accompany the disease and consist mainly of a patent foramen ovale and other interauricular septal defects. In the infant or rapidly growing child, especially without eye abnormalities, this syndrome may be mistaken for rickets. The abnormally long and slender extremities, the absence of flared epiphyses, normal blood calcium and phosphorus, and perhaps obscure anomalies in the parents, should lead one to suspect arachnodactyly. The symptoms of weakness, fatigue, moderate dyspnea on exertion, malnutrition and a coarse systolic murmur in early childhood may focus attention on the cardiovascular system to the exclusion of what appear to be lesser anomalies. The erroneous diagnosis of rheumatic heart disease with malnutrition and rachitic stigmas may be made.

Roentgen Therapy of Neoplasms of Brain.—Peirce and his associates treated primary neoplasms of the brain stem with radiation. For a time a conservative program was followed. This consisted in several series of 3,000 to 6,000 roentgens (in air) divided among several ports at three month intervals until the desired total was reached. So little constitutional reaction was encountered that the authors now commonly administer total doses of 10,000 to 15,000 roentgens (in air) at 50 cm. focus skin distance with the Thoraeus filter, the half value layer being 2 mm. of copper. Filtration of 1 mm. of copper and 1 mm. of aluminum has been used occasionally. Definite clinical improvement was effected by roentgen therapy of primary malignant neoplasms of the brain and brain stem. Twenty-five of 60 patients with complete follow-up over the past four years are either alive and well or alive and well save for residual symptoms. No deleterious effects due to the roentgen therapy have been observed in the series. Primary regrowth of hair has been excellent. No late degenerative changes have been observed following total tumor doses of 15,000 roentgens. Glioblastoma multiforme continues to show a high mortality rate despite increasingly large doses of roentgen radiation. Tumor doses in excess of 7,500 roentgens will be required. The effect on astrocytoma is not as great as would be expected, but this should not discourage treatment similar to that recommended for glioblastoma.

Western J. Surg., Obst. & Gynecology, Portland, Ore.

53:301-340 (Sept.) 1945

Ectopic Pregnancy. G. C. Schauffler.—p. 301.
*Thrombophlebitis of Cubital Veins in Blood Donors. C. M. Zukerman.—p. 311.
Variations and Anomalies of Biliary Duct System and Its Associated Blood Supply. G. F. Osler and R. S. Dow.—p. 316.
Gastric Adenomas: Pathologic Study. J. H. Rieniets and A. C. Broders.—p. 322.

Thrombophlebitis of Cubital Veins in Blood Donors.—In approximately 285,000 venipunctures performed at the Blood Donor Center at Chicago, thrombophlebitis in the cubital veins following venesection occurred in 12 instances. The predisposing factors to this complication appear to be trauma to the vein wall, slowing of the blood flow by application of a circular bandage, hematoma, systemic reaction, acute flexion of the forearm and straining of the arm during exercise following the venipuncture. Eleven cases occurred in females and 1 case in a male. The best preventive measures appear to be careful venipuncture technic, immediate discontinuance of the bleeding if hematoma develops or the donor complains of the needle causing discomfort and preventing the donor from flexing acutely his forearm after venipuncture. A circular bandage should not be applied as a dressing. Disability following this complication averaged approximately four months.

FOREIGN

An asterisk (*) before a title indicates that the article is abstracted below. Single case reports and trials of new drugs are usually omitted.

British Journal of Tuberculosis, London

39:49-76 (April & July) 1945

Radiotherapy in Inoperable Cases of Cancer of Bronchus. G. Hilton.—p. 51.
Comparison of Two Types of Tuberculin Patch Test. H. Climie.—p. 61.
Dust Diseases and Compensation: Some Personal Experiences. A. Meiklejohn.—p. 63.

Irish Journal of Medical Science, Dublin

232:101-132 (April) 1945

Thoracoplasty: Review: J. H. Coolican.—p. 101.
Sulfonamide Resistant Gonorrhea in Male. B. Solomons Jr.—p. 106.
Diphtheria Prophylaxis in Diphtheria Free Districts. J. B. O'Regan.—p. 117.
Salmonella Organisms in Unusual Sites. W. P. O'Callaghan.—p. 123.

South African Journal Medical Sciences, Johannesburg

10:35-68 (June) 1945

Anatomy of South African Negro Larynx. P. H. Boshoff.—p. 35.
Pharmacologic Actions of Cassine Croceum DC and Mundelia Suberosa Benth. N. Sapeika.—p. 51.
Modified Liver Aspiration Biopsy Apparatus and Technic, with Special Reference to Its Clinical Applications as Assessed by 500 Biopsies. T. Gillman and J. Gillman, with technical assistance of J. G. Bryden.—p. 53.

Acta Medica Scandinavica, Stockholm

120:195-406 (March 17) 1945. **Partial Index**

Kidney Function and Renal Clearances of Some Sulfonamide Derivatives. O. Lindahl and B. Josephson.—p. 195.
Normal Excretion of Urinary Constituents of Low Tubular Reabsorbability, Together with Remarks Concerning Variability of Glomerular Filtration. G. Ekehorn.—p. 227.
*Pressor Activity in Urine in Hypertension. U. S. von Euler and T. Sjöstrand.—p. 276.
Ulcer and Wartime: Study of Ulcer Cases at Serafimer Hospital in Recent Years. T. Sällström.—p. 288.
*Is There Primary Acquired Hemolytic Jaundice? Communication of Supposed Case and Some Investigations on Erythrocytes. A. Kirkegaard and Gertrud Kirkegaard.—p. 305.
Emphysema of Lungs: Its Symptoms and Relations to Other Diseases. H. Heckscher.—p. 349.
Leptospirosis Sejroe: Clinical Survey Based on 29 Cases. O. P. Nielsen and E. Hertel.—p. 384.

Pressor Activity in Urine.—Euler and Sjöstrand prepared ether extracts of urine from 37 patients with hypertension, from 59 patients with various diseases but with normal blood pressure, and from normal persons who were known to be nonsmokers. The pressor activity of these urine extracts was tested on the blood pressure of cats. The presence of pressor substances in the urine from healthy persons was confirmed. The pressor activity of urine from patients with various diseases but with normal blood pressure did not differ significantly from that of normal persons. There was a statistically lower content of pressor activity in the urine from patients with hypertension. In 3 cases of chronic nephritis the amount of pressor substances was so low that it could not be determined. It may be considered as established that urine from hypertensive patients does not contain more pressor activity than urine from persons with normal blood pressure but actually may contain less. The pressor activity of urine was given in terms of isoamylamine hydrochloride, which has generally been assumed to account for the pressor action of urine. Experiments carried out by the authors suggest that this substance may not be wholly responsible for the effect. In a few cases the action of isoamylamine was diminished or even suppressed by cocaine, but in most cases the effect was unchanged.

Primary Acquired Hemolytic Jaundice.—The Kirkegaards consider primary acquired hemolytic jaundice as a hemolytic anemia associated with jaundice without a hereditary factor and without any other underlying disorder. Sixty-nine cases with a negative family history have been collected from the literature; in 11 of these cases the examination of the blood of the families gave negative results. In these patients no other fundamental disorder such as infection, intoxication and disease of the blood was found to suggest that the acquired hemolytic jaundice is secondary to or symptomatic of such a disorder. In the authors' case of acquired hemolytic jaundice, as well as in 69 cases in the literature, it has not been possible to demonstrate any underlying disorder. Although it is not possible to give a valid proof of the occurrence of a primary acquired hemolytic jaundice, the authors believe that it is justifiable to consider the acquired form as an independent disorder.

120:407-525 (March 22) 1945

Normal Esterases and Pancreatic Lipase in Blood: Study with New Chemical and Clinical Methods (Second Secretin Test). H. Lagerlöf.—p. 407.
Histopathology of Liver in Infectious Mononucleosis Complicated by Jaundice, Investigated by Aspiration Biopsy. J. Bang and O. Wanscher.—p. 437.
Investigations on Use of Phycomyces Method for Estimation of Vitamin B_1 in Blood. H. O. Bang.—p. 447.
Oscillometric Studies on Change of Sensitivity of Oscillometer at Different Pressures and on Influence of State of Contraction of Arterial Wall on Oscillometric Curve. B. C. Christensen.—p. 474.
*Studies on Hyperventilation: I. Influence of Carbon Dioxide Tension in Arterial Blood on State of Contraction of Large Arteries in Man. B. C. Christensen.—p. 485.
Clinical Study of Polycythemia. I. M. Hirvonen.—p. 491.

Hyperventilation Studies.—Christensen made oscillometric determination on 6 normal persons under different types of ventilation. The experiments showed that ventilation favoring release of carbon dioxide from the blood brings about a constriction of the large arteries of the extremities. The change in the shape of the oscillometric curve occurred in all cases long before the appearance of subjective symptoms of acapnia. In none of the experiments was apnea observed after the hyperventilation, though in some of the cases there appeared symptoms of acapnia during the hyperventilation. Hypernictitation experiments were carried out on the same persons and in the same manner as the hyperventilation experiments. In none of the experiments did there occur any flattening of the oscillometric curve. A slight, involuntary hyperventilation was revealed in a few cases. Additional oscillometric measurements were made on 3 persons with severe anemia resulting in hyperpnea. These patients presented a distinctly flattened oscillometric curve associated with normal arterial pressure. Gradually, as the anemia and the hyperpnea subsided, the oscillometric curve became normal. The author believes that the state of contraction of the arteries is a fine indicator of carbon dioxide tension of the arterial blood.

120:527-614 (April 20) 1945. **Partial Index**

Effect of Oxygen Want and Conditions for Its Occurrence in Chronic Disorders of Lung. G. Birath.—p. 527.
*Felty's Syndrome: Splenomegaly, Leukopenia and Chronic Polyarthritis; Familial Occurrence. J. Zimmer.—p. 543.
Clinical Study of Polycythemia: II. M. Hirvonen.—p. 568.

Felty's Syndrome.—Zimmer reports the occurrence of Felty's syndrome in a woman aged 30. A sister of the patient presented a similar clinical syndrome. In her immediate family there were several persons with rheumatic fever. The patient presented the typical triad of chronic polyarthritis, leukopenia with granulocytopenia and enlarged spleen. The arthritis began three and a half years earlier in association with a nonspecific inflammation of the jaw. Sulfanilamide had been administered. The hyperplastic bone marrow showed arrested maturation of the granulocytes after the metamyelocyte phase. There was no generalized hypertrophy of the lymph nodes. Considerable loss of weight had occurred in recent years. Treatment with extract of liver, iron in large doses, a course of arsenic, local application of roentgen rays to the splenic region and blood transfusion proved ineffective. The effect of splenectomy was striking. The patient's temperature became normal on the second day after the operation. Leukocytosis and thrombocytosis developed. Arrest of maturation was immediately relieved. The patient regained her normal weight and returned to work on a farm. Granulocytopenia in predisposed persons with polyarthritis may present the clinical picture of Felty's syndrome. The disposition depends on an endogenous constitutional factor, which is suggested by the occurrence of Felty's syndrome in one of the sisters of the patient. Even if a direct morbid condition of the bone marrow cannot be excluded, a malfunction of the spleen may be a factor of great importance in the changes in the leukopoiesis (granulocytopenia) and the occurrence of the actual syndrome. This concept is supported by the complete recovery which took place after splenectomy.

Book Notices

Virus as Organism: Evolutionary and Ecological Aspects of Some Human Virus Diseases. By Frank MacFarlane Burnet, M.D., F.R.S., Director, Walter and Eliza Hall Institute of Research in Pathology and Medicine, Melbourne, Australia. Harvard University, the Edward K. Dunham Lectures for the Promotion of the Medical Sciences, 1944. Harvard University Monographs in Medicine and Public Health [Number 8]. Cloth. Price, $2. Pp. 134. Cambridge, Mass.: Harvard University Press; London: Oxford University Press, 1945.

This compact little book, which can easily be carried about in one's pocket, is full of provocative and digestible thoughts about the more important virus diseases of man. These thoughts were presented in the Edward K. Dunham Lectures given at Harvard University in 1944 by Dr. Burnet of Melbourne, Australia. He hails a long way from Cambridge, Mass., or for that matter from any part of America, but is no stranger to American students of virus disease or to others who have followed his work and perhaps read his previous book, published in 1940, on "The Biological Aspects of Infectious Disease." In the previous book, as in this one, Dr. Burnet goes to some pains to point out that the study of infectious disease in general, and virus disease in particular, is such an important aspect of human life that it is worth while trying to understand how it falls into the general scheme of things. He believes that there is plenty of room for further coordination with other biologic fields.

Not many people can do this, but Dr. Burnet combines the happy faculty of being a scientist of the first rank and interpreter of the implications of what he has learned and found. The world would be a happier place if there were more individuals of this kind.

Six representative groups of viruses all well known to the author are discussed each as familiar entities. They are presented not as noxious agents or disease-producing agents per se but as agents which perhaps will continue to survive by virtue of their capacity to act like any other biologic agent, namely to adjust to their environment through evolution and change. In developing this theme Dr. Burnet believes that viruses are micro-organisms which have evolved by parasitic degeneration from larger micro-organisms, many of them in all probability bacteria. Their behavior is interpreted in terms of biologic variation or mutations when the environment is such as to favor the survival of the variant over the original form. Within this biologic pattern it is necessary to consider the effect on the virus resulting from its transfer from one host to another, and with it goes the suggestion that in the past all or nearly all of the known virus diseases of man might have been originally derived from animal infections.

The book is a prize for the shelves of the bacteriologist, the virologist and the epidemiologist and, in fact, any who are interested in the whys and wherefores of infectious disease.

The Road to Recovery from Illness: A Study of Convalescent Homes Serving New York City. Prepared by Elizabeth G. Gardiner and Francisca K. Thomas for the Committee on Convalescent Care Practice. Paper. Pp. 197. New York: Hospital Council of Greater New York, [n. d.].

One of the major adjustments with which the medical profession is confronted, both in private practice and in hospital planning and administration, concerns the rapid shift in the character of illnesses with which we have to deal. Acute disease has rapidly given way to chronic disease. The normal aging of the population and the lowering of the birth rate would naturally involve such a change in the balance, but this has been exaggerated by the success of preventive as well as curative methods of treatment in the infectious diseases. As a result we have been caught off balance, with resulting confusion for the administrative and hardship for the patient group that seeks aid.

The private hospital, because of increased occupancy during the war years, resorted to the simple expedient of discouraging the admission of the chronic case and of pushing the convalescent patient out as rapidly as possible. Public hospitals in many instances have followed a similar pattern—few have squarely faced the problem. They have temporized with the immediate needs and have lagged even in planning to meet a situation that is becoming ever more obvious and pressing.

This study of Gardiner and Thomas will prove useful in stimulating an active interest in the subject as well as providing factual data that will be useful. It presents the summary of cooperative efforts that began in 1920 with the appointment of a series of committees by the New York Academy of Medicine (Report of the Public Health Committee of the New York Academy of Medicine: Institutional Convalescence: Standards for the Care and Management of Convalescent Homes, New York, 1925) and which have been under consideration at various times since that time.

While Gardiner and Thomas's study has been focused largely about the convalescent home, the scope includes some aspects of the care of the chronically ill as well. New York has been fortunate in the development of the Montefiore Hospital, a project that has pioneered in this particular field.

The study of the convalescent homes in the New York area was on a sufficiently broad basis (there are more than eight hundred institutions of this character in the region) to provide assurance that the recommendations made by the authors are worthy of careful consideration by every hospital administrator and physician.

The Falling Sickness: A History of Epilepsy from the Greeks to the Beginnings of Modern Neurology. By Owsei Temkin, M.D., Associate Professor of the History of Medicine at the Johns Hopkins University, Baltimore, Md. Publications of the Institute of the History of Medicine. The Johns Hopkins University, First Series: Monographs, Volume IV. Cloth. Price, $4. Pp. 380, with 7 illustrations. Baltimore: Johns Hopkins Press, 1945.

A reader of medical books does not every year find in his hands a new book which opens a world of rare and ancient treasures. This joy of discovery belongs to the reader of Dr. Temkin's book on "The Falling Sickness." The art of printing rescued from moldering destruction the hand written manuscripts of medical lore. However, these and many later writings are again inaccessible because of the decay of Latin and Greek as the physician's chosen means of written communication. With painstaking labor the author has combed the literature of the ancient and medieval worlds for explanations and treatments of the weird disease of sudden falling. He has sought the opinion not only of noted physicians and university professors but also of village practitioners, charlatans, functionaries of the church and the common man. The result is not only a panorama of seizures but a view of the painful progress of medicine, of science and of human relations from Hippocrates to John Hughlings Jackson. Therefore the book is not merely for the epileptologist but for all physicians and indeed all educated people who wish to increase the depth and the perspective of their knowledge and their sympathies.

Following are the main divisions of the subject: antiquity; middle ages; renaissance with its theological, philosophical and social aspects; the great systems of the iatrochemists and the iatrophysicists, of animism and eclecticism, the fight against the supernatural and the occult; and, finally, the nineteenth century. The 706 references, the index of about 700 personal names and the 1,717 footnotes attest the scholarship of the book. Six illustrations of seizures add interest to the text. The paper and binding are of prewar quality. The modest price of the volume is explained by use of the Epilepsy Medical Research Fund of Johns Hopkins University.

The best news for the general reader is saved for the last. The writing is clear, readable and at times amusing. Many books have been written about epilepsy, but this book has no historical rival. It occupies a separate shelf in the reviewer's Library of Fame.

Straight Down a Crooked Lane. By Martha Byrd Porter. Boards. Price, $3. Pp. 234, with illustrations by Hans Jelinek. Richmond, Virginia: Dietz Press, Inc., 1945.

To the collections of personal memoirs like "Life with Father" is added this account of the life of a doctor and his wife, told by a lady with a sense of humor. Dr. Porter has practiced in Richmond for a good many years, and Mrs. Porter has observed with him the comings and goings of the medical elite and has indeed gone with him to some of the far places in the world. Like most doctors' wives, Mrs. Porter has had a full life. She tells about it gleefully. James Branch Cabell says it is "a lively, uninhibited volume which richly, in my judgment, merits praise. A beautiful book, alike in format and its matter."

Queries and Minor Notes

THE ANSWERS HERE PUBLISHED HAVE BEEN PREPARED BY COMPETENT AUTHORITIES. THEY DO NOT, HOWEVER, REPRESENT THE OPINIONS OF ANY OFFICIAL BODIES UNLESS SPECIFICALLY STATED IN THE REPLY. ANONYMOUS COMMUNICATIONS AND QUERIES ON POSTAL CARDS WILL NOT BE NOTICED. EVERY LETTER MUST CONTAIN THE WRITER'S NAME AND ADDRESS, BUT THESE WILL BE OMITTED ON REQUEST.

PENICILLIN IN EARLY SYPHILIS—SYPHILITIC REINFECTION

To the Editor:—Since the institution of penicillin therapy for syphilis in the Army I have come across 3 cases which have aroused considerable interest. In each of the 3, one course of 2,400,000 units of penicillin therapy for primary syphilis was administered. In all 3 the diagnosis was established on a dark field examination of the penile lesion. All three patients returned within a six months period with another penile lesion which revealed in each instance Treponema pallidum on dark field examination. I have been unable to find any definite information or reports available on the incidence of reinfection of primary syphilis. I feel that 2 of these cases are true reinfections because they are associated with a definite history of exposure and that the location of the lesion on the second recurrence is different from that of the first. The third case is questionable. Please advise regarding the incidence of reinfection in syphilis.

Alfred A. Diamond, Captain, M. C., A. U. S.

To the Editor:—I wish your opinion in a case of early syphilis treated by penicillin. There are lesions on the vulva of about one month's duration. Treatment has consisted of 3,000,000 units of penicillin in ten days. The Kahn reaction at the end of two weeks is still positive.

Don S. Fraser, M.D., Panama City, Fla.

ANSWER.—There is an enormous literature on reinfection in syphilis, reference to which may be found in any standard textbook, particularly the textbooks of Stokes and of Moore. In this connection the editorial entitled "The Changing Concept of Reinfection with Syphilis and Its Applicability as a Criterion of Cure" may be of interest. This appeared in the *American Journal of Syphilis, Gonorrhea and Venereal Diseases* (**29**:474 [July] 1945).

The information available indicates that, in early syphilis, a dosage of 3,000,000 units of penicillin in ten days is probably curative in 80 to 85 per cent of the patients so treated, assuming that the treatment is given by injections of an aqueous solution at intervals of not less than every three hours day and night. Failure of treatment, represented by reinfection, clinical or serologic relapse or seroresistance, is to be expected in 15 to 20 per cent. The blood serologic test of patients whose condition progresses satisfactorily becomes negative on the average from sixty to one hundred and twenty days after the initiation of treatment.

Patients so treated should be examined at monthly intervals for the first year, with clinical inspections and with quantitatively titered blood serologic tests. In the absence of clinical manifestations and with a blood serologic titer falling to or toward seronegativity, the patient is progressing satisfactorily. On the other hand, the absence of quantitative serologic response, the presence of serologic relapse (as indicated by a confirmed rising titer) or the appearance of new clinical manifestations is an indication for retreatment. The patient's spinal fluid should be tested six months after the completion of penicillin therapy. If progress during the first year after treatment has been uneventful and seronegativity achieved, the patient may be checked during the second year every three months rather than once a month. Continued and prolonged observation for a minimum of five years is desirable. If relapse occurs, one may treat the patient again with penicillin, utilizing for the second course a total dose at least twice that originally administered, and combining with the second course a minimum of six injections of oxophenarsine hydrochloride given at the approximate dosage level of 1 mg. per kilogram, injections being given every other day.

AIR TRAVEL AND HYPERTENSION

To the Editor:—What is known about the effects of air travel on patients with essential hypertension? Can a patient of 56 with a blood pressure of 190/110 be permitted to travel by air?

M.D., Massachusetts.

ANSWER.—Essential hypertension without complication is not a contraindication for air travel at usual airline flight levels. However, cardiovascular complications of hypertension are contraindications to air travel.

DERMATITIS FROM OILS AND SOLVENTS

To the Editor:—Eight men working in a neighboring plant engaged in manufacturing motors developed a dermatitis caused by sensitivity to cast iron dust, oils or solvents. In each case the diagnosis was quite definite, the history, character and distribution of the dermatitis being typical of an industrial dermatitis. The dermatitis cleared when they were removed from contact with these agents but recurred when they returned to the original work. These workers were then assigned to outside work, and the dermatitis remained away for a period of from three to six months in some of the cases and then recurred, even though there was no further exposure to the original irritants. It has always been my belief that the skin, like any other organ, after sustaining a severe initial injury could have subsequent attacks without further exposure to the original irritant.

M.D., Wisconsin.

ANSWER.—Since cast iron is innocuous as far as dermatitis is concerned, the industrial dermatitis was probably caused by oils and solvents. Since oils and solvents are encountered in many other places than in manufacturing motors, it is quite reasonable to deduce that those cases which recurred did so because the workmen again came in contact with oils or solvents. The type of dermatitis caused by cutting oils in general is different from that caused by solvents. Oils usually cause folliculitis, comedones and acne on the extensor surfaces of the forearms and thighs. Solvents cause an eczematoid dermatitis and usually affect the interdigital spaces, the fingers and the dorsum of the hands, although the forearms may also be involved. Subsequent attacks of dermatitis venenata cannot occur without subsequent exposure to the same irritant or a similar irritant. In the case of dermatitis from petroleum solvents, which act by defatting the skin, similar attacks of dermatitis may occur from contact with any of the solvents which also defat the skin, such as the chlorinated hydrocarbons, or even ordinary skin cleansers such as soap and water.

Reference:

Peck, Samuel M.: Dermatitis from Cutting Oils, Solvents and Dielectrics, Including Chloracne, THE JOURNAL, May 20, 1944, p. 190.

TOXEMIA OF PREGNANCY AND LATE SYPHILIS

To the Editor:—A woman aged 35 in her seventh month of pregnancy has positive Wassermann and positive Kahn reactions to syphilis, with a vague history of exposure over ten years ago. In addition she has swelling of the hands, pitting edema of the ankles and pretibial region and a blood pressure of 178/92; there is no nitrogen retention nor urinary albumin. She was hospitalized and given 3 million units of penicillin, with bed rest and sedation and a salt free diet; her blood pressure returned to normal limits in three or four days. She came into the office three days after leaving the hospital for arsenical treatment, but her blood pressure had risen again so she was sent home to bed. I should like to give this patient intensive arsenical and bismuth treatment. Is this advisable?

Robert L. Bestoso, M.D., Newport, R. I.

ANSWER.—Since the patient is manifesting evidence of toxemia of pregnancy, it would seem advisable to give a second course of penicillin for the syphilis. In addition to the salt free diet, sedation and additional bed rest should be continued. If the syphilis is of ten years' duration, the likelihood of her having a child with congenital syphilis is less than if the syphilis had been more recently acquired. Nevertheless, treatment for syphilis is necessary to endeavor to obtain for her a nonsyphilitic child. Penicillin is less toxic to the kidney and liver than antisyphilitic chemotherapy, which is the reason for giving the second course. The value of penicillin in preventing congenital syphilis has not been fully established, but at the moment the results are encouraging.

PRURITUS ANI AND ALLERGY

To the Editor:—I have under observation a man aged 57 who has been intensively treated for the last several years for a very severe pruritus ani, including surgery of perianal skin, and who is highly sensitized or allergic to a variety of common drugs, including aspirin, salicylates and the sulfonamides. A severe burning and itching rash breaks out repeatedly on his forearms and face; this is an acute dermatitis of the papulovesicular type. Any suggestions concerning desensitization or treatment of this patient will be appreciated.

M.D., New York.

ANSWER.—Desensitization to drugs is not likely to be successful. If this is attempted, the oral route should be used. Minute doses of the drugs—perhaps in the form of a solution to measure more accurately—are given daily in slightly increasing amounts. It should take approximately two months to reach the dose to be used therapeutically. Other allergic factors should be considered (Schapiro, Saul, and Albert, M. M.: The Role of Allergy in the Production of Pruritus Ani, *J. Invest. Dermat.* **4**:219 [June] 1941). The presence of food allergy may be investigated by means of skin tests, trial diets or a combination of the two. It is possible also that the condition may be due to a fungous infection or to intestinal parasites.